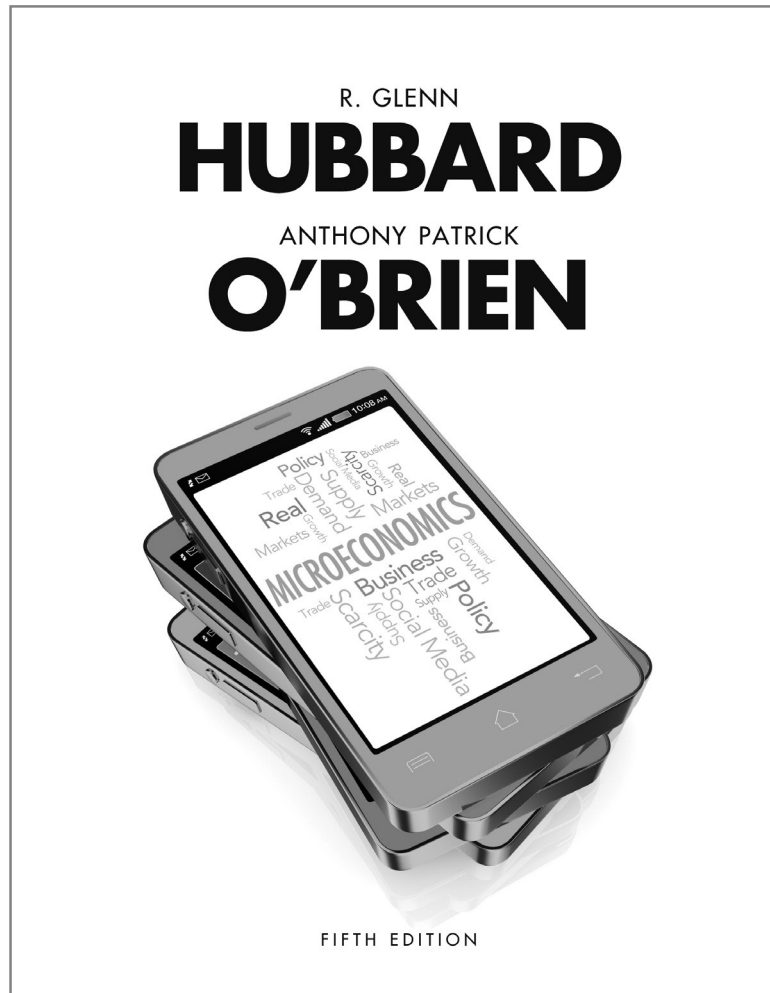


# TEST ITEM FILE

## VOLUME 1 CHAPTERS 1-10

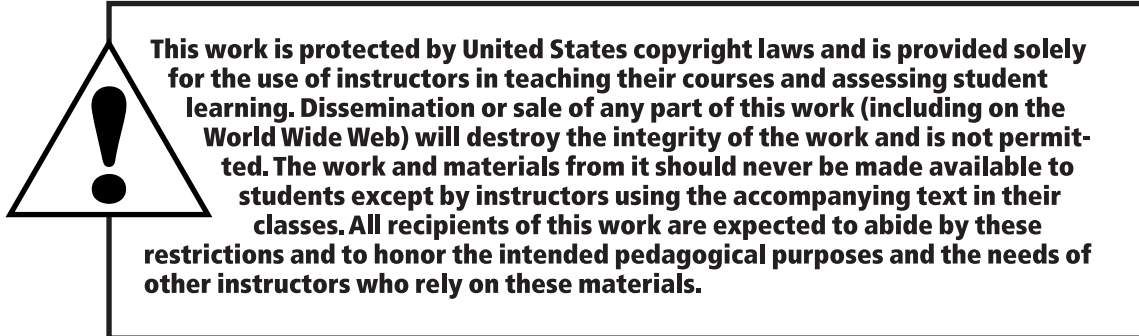
### for



**Randy Methenitis**  
Richland College

**PEARSON**

Boston Columbus Indianapolis New York San Francisco Upper Saddle River  
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto  
Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo



AVP/Executive Editor: David Alexander  
Executive Developmental Editor: Lena Buonanno  
Editorial Project Manager: Lindsey Sloan  
Production Project Manager: Andra Skaalrud  
Senior Manufacturing Buyer: Carol Melville

---

Copyright © 2015, 2013, 2010 Pearson Education, Inc. All rights reserved. Manufactured in the United States of America. This publication is protected by Copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. To obtain permission(s) to use material from this work, please submit a written request to Pearson Education, Inc., Permissions Department, One Lake Street, Upper Saddle River, New Jersey 07458, or you may fax your request to 201-236-3290.

10 9 8 7 6 5 4 3 2 1

**PEARSON**

ISBN-10: 0-13-345586-6  
ISBN-13: 978-0-13-345586-1



# Contents

---

Chapter 1	Economics: Foundations and Models .....	1
Chapter 2	Trade-offs, Comparative Advantage, and the Market System.....	58
Chapter 3	Where Prices Come From: The Interaction of Demand and Supply .....	130
Chapter 4	Economic Efficiency, Government Price Setting, and Taxes .....	195
Chapter 5	Externalities, Environmental Policy, and Public Goods.....	250
Chapter 6	Elasticity: The Responsiveness of Demand and Supply .....	324
Chapter 7	The Economics of Health Care.....	409
Chapter 8	Firms, the Stock Market, and Corporate Governance .....	449
Chapter 9	Comparative Advantage and the Gains from International Trade .....	509
Chapter 10	Consumer Choice and Behavioral Economics.....	558



## Test Item File

This Test Item File (TIF) was prepared by Randy Methenitis of Richland College. The TIF includes multiple-choice questions, true/false, short-answer, and graphing questions that are annotated with the following information:

- **Difficulty:** 1 for straight recall; 2 for some analysis; 3 for complex analysis
- **Page Ref:** corresponds to the page of the main text the question is drawn from
- **Topic:** the term or concept the question supports
- **Learning outcome**
- **AACSB** (see description that follows)

### The Association to Advance Collegiate Schools of Business (AACSB)

The test bank author has connected select test bank questions to the general knowledge and skill guidelines found in the AACSB standards.

**What is the AACSB?** AACSB is a not-for-profit corporation of educational institutions, corporations, and other organizations devoted to the promotion and improvement of higher education in business administration and accounting. A collegiate institution offering degrees in business administration or accounting may volunteer for AACSB accreditation review. The AACSB makes initial accreditation decisions and conducts periodic reviews to promote continuous quality improvement in management education. Pearson Education is a proud member of the AACSB and is pleased to provide advice to help you apply AACSB Learning Standards.

**What are AACSB Learning Standards?** One of the criteria for AACSB accreditation is the quality of the curricula. Although no specific courses are required, the AACSB expects a curriculum to include learning experiences in such areas as: communication; ethical reasoning; analytic skills; use of information technology; multicultural and diversity; and reflective thinking. These six categories are AACSB Learning Standards. Questions that test skills relevant to these standards are tagged with the appropriate standard. For example, a question testing the moral questions associated with externalities would receive the Ethical Reasoning tag.

**How can instructors use the AACSB Tags?** Tagged questions help you measure whether students are grasping the course content that aligns with the AACSB guidelines noted above. In addition, the tagged questions may help instructors identify potential applications of these skills. This in turn may suggest enrichment activities or other educational experiences to help students achieve these skills.

## TestGen

The computerized TestGen package allows instructors to customize, save, and generate classroom tests. The test program permits instructors to edit, add, or delete questions from the test banks; edit existing graphics and create new graphics; analyze test results; and organize a database of tests and student results. This software allows for extensive flexibility and ease of use. It provides many options for organizing and displaying tests, along with search and sort features. The software and the test banks can be downloaded from the Instructor's Resource Center [www.pearsonhighered.com/irc](http://www.pearsonhighered.com/irc).

## Other Supplements Available to You

**MyEconLab** is a unique online course management, testing, and tutorial resource. Visit [www.myeconlab.com](http://www.myeconlab.com) for more information.

The **Instructor's Manual** includes chapter-by-chapter summaries, new examples, teaching outlines and tips, and solutions. Download this supplement from the Instructor's Resource Center ([www.pearsonhighered.com/hubbard](http://www.pearsonhighered.com/hubbard)).

### PowerPoint® Presentations

1. A comprehensive set of PowerPoint® slides can be used by instructors for class presentations or by students for lecture preview or review.
2. A student version of the PowerPoint® slides is available as .pdf files.

**CourseSmart** goes beyond traditional expectations providing instant, online access to the textbooks and course materials you need at a lower cost to students. Learn more at [www.coursesmart.com](http://www.coursesmart.com).

# Chapter 1

## Economics: Foundations and Models

### 1.1 Three Key Economic Ideas

- 1) Recent changes occurring within the U.S. health care system, including lower insurance reimbursement rates, have resulted in
- A) a growing number of doctor's choosing to open private practices.
  - B) more medical practices being owned by hospitals than by individual doctors.
  - C) a majority of hospitals closing routine medical practices in order to focus only on emergency care facilities.
  - D) a majority of doctors working directly for insurance companies.

Answer: B

Diff: 2 Page Ref: 3

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 2) In economics, choices must be made because we live in a world of
- A) unemployment.
  - B) scarcity.
  - C) greed.
  - D) unlimited resources.

Answer: B

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 3) Which of the following statements is true about scarcity?
- A) Scarcity refers to the situation in which unlimited wants exceed limited resources.
  - B) Scarcity is not a problem for the wealthy.
  - C) Scarcity is only a problem when a country has too large a population.
  - D) Scarcity arises when there is a wide disparity in income distribution.

Answer: A

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 4) The basic economic problem of \_\_\_\_\_ has always existed and will continue to exist.
- A) scarcity
  - B) efficiency
  - C) inflation
  - D) recession

Answer: A

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 5) By definition, economics is the study of
- A) how to make money in the stock market.
  - B) how to make money in a market economy.
  - C) the choices people make to attain their goals, given their scarce resources.
  - D) supply and demand.

Answer: C

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 6) An economic \_\_\_\_\_ is a simplified version of some aspect of economic life used to analyze an economic issue.
- A) market
  - B) trade-off
  - C) variable
  - D) model

Answer: D

Diff: 1 Page Ref: 4

Topic: Economic Models

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 7) Where do economic agents such as individuals, firms and nations, interact with each other?
- A) in public locations monitored by the government
  - B) in any arena that brings together buyers and sellers
  - C) in any physical location where people can physically get together for selling goods, such as shopping malls
  - D) in any location where transactions can be monitored by consumer groups and taxed by the government

Answer: B

Diff: 1 Page Ref: 4

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) The term \_\_\_\_\_ in economics refers to a group of buyers and sellers of a product and the arrangement by which they come together to trade.
- A) collective
  - B) cooperative
  - C) market
  - D) trade-off

Answer: C

Diff: 1 Page Ref: 4

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) Economists assume that individuals
- A) behave in unpredictable ways.
  - B) will never take actions to help others.
  - C) prefer to live in a society that values fairness above all else.
  - D) are rational and respond to incentives.

Answer: D

Diff: 1 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) Economists assume that rational behavior is useful in explaining choices people make
- A) because irrational people do not make economic choices.
  - B) even though people may not behave rationally all the time.
  - C) because individuals act rationally all the time in all circumstances.
  - D) even though people rarely, if ever, behave in a rational manner.

Answer: B

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 11) Economists assume that rational people do all of the following *except*
- A) use all available information as they act to achieve their goals.
  - B) undertake activities that benefit others and hurt themselves.
  - C) weigh the benefits and costs of all possible alternative actions.
  - D) respond to economic incentives.

Answer: B

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 12) Economics does not study correct or incorrect behaviors but rather it assumes that economic agents behave \_\_\_\_\_, meaning they make the best decisions given their knowledge of the costs and benefits.

A) equitably                      B) rationally                      C) emotionally                      D) selfishly

Answer: B

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 13) Consider the following statements:
- a. Car owners purchase more gasoline from a gas station that sells gasoline at a lower price than other rival gas stations in the area.
  - b. Banks do not take steps to increase security since they believe it is less costly to allow some bank robberies than to install expensive security monitoring equipment.
  - c. Firms produce more of a particular DVD when its selling price rises.

Which of the above statements demonstrates that economic agents respond to incentives?

- A) a only.
- B) b only.
- C) c only.
- D) a and b.
- E) a, b, and c.

Answer: E

Diff: 3 Page Ref: 5

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 14) Suppose that some teachers have decided that economic and financial uncertainty have made the prospect of retiring more risky, and therefore carry a higher cost than not retiring. By using all available information as they act to achieve their goals, these teachers are exemplifying the economic idea that
- A) people are rational.
  - B) people respond to economic incentives.
  - C) optimal decisions are made at the margin.
  - D) equity is more important than efficiency.

Answer: A

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 15) Suppose that some investors have decided that economic and financial uncertainty have made the prospect of investing in domestic stock markets more risky than investing in foreign stock markets, and therefore choose to invest in foreign markets. By using all available information as they act to achieve their goals, these investors are exemplifying the economic idea that
- A) people are rational.
  - B) people respond to economic incentives.
  - C) optimal decisions are made at the margin.
  - D) equity is more important than efficiency.

Answer: A

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 16) Suppose the U.S. government encouraged new medical school graduates to take over existing practices from doctors wishing to retire by paying both the new and retiring doctors \$100,000. These doctors would be exemplifying the economic idea that
- A) people are rational.
  - B) people respond to economic incentives.
  - C) optimal decisions are made at the margin.
  - D) equity is more important than efficiency.

Answer: B

Diff: 2 Page Ref: 5

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



- 17) Suppose the U.S. government encouraged consumers to trade in their old automobiles for more efficient, new models by paying up to \$5,000 for the old automobiles. These consumers would be exemplifying the economic idea that
- A) people are rational.
  - B) people respond to economic incentives.
  - C) optimal decisions are made at the margin.
  - D) equity is more important than efficiency.

Answer: B

Diff: 2 Page Ref: 5

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 18) Holding all other personal characteristics—such as age, gender, and income—constant, economists would expect that
- A) people with health insurance will be less likely to be overweight than people without health insurance.
  - B) people with health insurance will be more likely to be overweight than people without health insurance.
  - C) people with health insurance will be equally likely to be overweight as people without health insurance.
  - D) there is no correlation between having health insurance and being overweight.

Answer: B

Diff: 2 Page Ref: 5–7

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 19) Since 1994, obesity rates in the United States
- A) have been on a slow and steady decline.
  - B) have increased in all 50 states.
  - C) have primarily increased in the Southeast and remained constant or slightly decreased in the remainder of the country.
  - D) have remained fairly constant throughout the country.

Answer: B

Diff: 1 Page Ref: 5–7

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 20) In economics, the term \_\_\_\_\_ means "additional" or "extra."
- A) allocative
  - B) marginal
  - C) equity
  - D) optimal

Answer: B

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 21) A grocery store sells a bag of potatoes at a fixed price of \$2.30. Which of the following is a term used by economists to describe the money received from the sale of an additional bag of potatoes?

- A) marginal revenue
- B) gross earnings
- C) pure profit
- D) marginal costs
- E) net benefit

Answer: A

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 22) Economists reason that the optimal decision is to continue any activity up to the point where the

- A) marginal benefit is zero.
- B) marginal benefit is greater than the marginal cost.
- C) marginal cost is zero.
- D) marginal benefit equals the marginal cost.

Answer: D

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 23) Marginal analysis involves undertaking an activity

- A) until its marginal costs start declining.
- B) only when its marginal benefits are positive.
- C) until its marginal benefits equal marginal costs.
- D) only if its marginal costs are greater than its marginal benefits.

Answer: C

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 24) The revenue received from the sale of \_\_\_\_\_ of a product is a marginal benefit to the firm.

- A) an additional unit
- B) the total number of units
- C) no units
- D) only profitable units

Answer: A

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

25) Making optimal decisions "at the margin" requires

- A) making decisions according to one's whims and fancies.
- B) making consistently irrational decisions.
- C) weighing the costs and benefits of a decision before deciding if it should be pursued.
- D) making borderline decisions.

Answer: C

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

26) Making "how much" decisions involve

- A) calculating the total benefits of the activity and determining if you are satisfied with that amount.
- B) calculating the total costs of the activity and determining if you can afford to incur that expenditure.
- C) calculating the average benefit and the average cost of an activity to determine if it is worthwhile undertaking that activity.
- D) determining the additional benefits and the additional costs of that activity.

Answer: D

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

27) The extra cost associated with undertaking an activity is called

- A) net loss.
- B) marginal cost.
- C) opportunity cost.
- D) foregone cost.

Answer: B

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

28) DeShawn's Detailing is a service that details cars at the customers' homes or places of work.

DeShawn's cost for a basic detailing package is \$40, and he charges \$75 for this service. For a total price of \$90, DeShawn will also detail the car's engine, a service that adds an additional \$20 to the total cost of the package. What is DeShawn's marginal benefit if he sells a basic detailing package?

- A) \$35
- B) \$75
- C) He makes a marginal loss of \$15, not a marginal benefit.
- D) The marginal benefit cannot be determined.

Answer: B

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 29) DeShawn's Detailing is a service that details cars at the customers' homes or places of work. DeShawn's cost for a basic detailing package is \$40, and he charges \$75 for this service. For a total price of \$90, DeShawn will also detail the car's engine, a service that adds an additional \$20 to the total cost of the package. What is the marginal cost of adding the engine detailing to the basic detailing package?
- A) \$20  
B) \$30  
C) \$60  
D) \$60 plus the value of his time

Answer: A

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 30) DeShawn's Detailing is a service that details cars at the customers' homes or places of work. DeShawn's cost for a basic detailing package is \$40, and he charges \$75 for this service. For a total price of \$90, DeShawn will also detail the car's engine, a service that adds an additional \$20 to the total cost of the package. Should DeShawn continue to offer the engine detailing service?
- A) yes, he still makes a profit by selling the engine detailing service with the basic detailing package  
B) yes, but only if he raises the price of the basic detailing package  
C) no, his marginal benefit is less than his marginal cost  
D) More information is needed for DeShawn to make this decision.

Answer: C

Diff: 3 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 31) Allison's Auto Art is a company that applies pinstripes to vehicles. Allison's cost for a basic 1-color pinstriping job is \$35, and she charges \$95 for this service. For a total price of \$175, Allison will apply a fancier 3-color pinstripe application to an automobile, a service that adds an additional \$40 to the total cost of the package. What is Allison's marginal benefit if she sells a basic 1-color job?
- A) \$35  
B) \$60  
C) \$95  
D) The marginal benefit cannot be determined.

Answer: C

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 32) Allison's Auto Art is a company that applies pinstripes to vehicles. Allison's cost for a basic 1-color pinstriping job is \$35, and she charges \$95 for this service. For a total price of \$175, Allison will apply a fancier 3-color pinstripe application to an automobile, a service that adds an additional \$40 to the total cost of the package. What is the marginal cost of moving up from the 1-color application to the 3-color application?
- A) \$35  
B) \$40  
C) \$80  
D) \$175

Answer: B

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 33) Allison's Auto Art is a company that applies pinstripes to vehicles. Allison's cost for a basic 1-color pinstriping job is \$35, and she charges \$95 for this service. For a total price of \$175, Allison will apply a fancier 3-color pinstripe application to an automobile, a service that adds an additional \$40 to the total cost of the package. Should Allison continue to offer the 3-color pinstripe application?
- A) yes, she still makes a profit by selling the 3-color application.
  - B) yes, but only if she lowers the price of the 1-color application
  - C) no, her marginal benefit is less than her marginal cost
  - D) More information is needed for Allison to make this decision.

Answer: A

Diff: 3 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### Scenario 1-1

Suppose a cell phone manufacturer currently sells 20,000 cell phones per week and makes a profit of \$5,000 per week. A manager at the plant observes, "Although the last 3,000 cell phones we produced and sold increased our revenue by \$6,000 and our costs by \$6,700, we are still making an overall profit of \$5,000 per week so I think we're on the right track. We are producing the optimal number of cell phones."

- 34) **Refer to Scenario 1-1.** Using marginal analysis terminology, what is another economic term for the incremental revenue received from the sale of the last 3,000 cell phones?
- A) gross earnings
  - B) marginal revenue
  - C) sales revenue
  - D) gross profit

Answer: B

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 35) **Refer to Scenario 1-1.** Using marginal analysis terminology, what is another economic term for the incremental cost of producing the last 3,000 cell phones?
- A) marginal cost
  - B) operating cost
  - C) explicit cost
  - D) Any of the above terms are correct.

Answer: A

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 36) *Refer to Scenario 1-1.* Had the firm not produced and sold the last 3,000 cell phones, would its profit be higher or lower, and if so by how much?

A) Its profit will be \$6,700 higher.                      B) Its profit will be \$700 higher.  
C) Its profit will be \$700 lower.                      D) Its profit will be \$6,000 lower.

Answer: B

Diff: 2      Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

**Table 1-1**

Hours Open	Total Revenue (dollars)
1	\$50
2	75
3	95
4	110
5	120
6	125

Lydia runs a small nail salon in the town of New Hope. She is debating whether she should extend her hours of operation. Lydia figures that her sales revenue will depend on the number of hours the nail salon is open as shown in the table above. She would have to hire a worker for those hours at a wage rate of \$10 per hour.

- 37) *Refer to Table 1-1.* Using marginal analysis, how many hours should Lydia extend her nail salon's hours of operations?

A) 2 hours                      B) 3 hours                      C) 4 hours                      D) 5 hours                      E) 6 hours

Answer: D

Diff: 3      Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 38) *Refer to Table 1-1.* What is Lydia's marginal benefit if she decides to stay open for two hours instead of one hour?

A) \$25                      B) \$50                      C) \$75                      D) \$125

Answer: A

Diff: 2      Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 39) *Refer to Table 1-1.* What is Lydia's marginal cost if she decides to stay open for two hours instead of one hour?

A) \$10                      B) \$20                      C) \$25                      D) \$40

Answer: A

Diff: 2      Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

Table 1-2

Hours Open	Total Revenue (dollars)
1	\$25
2	45
3	70
4	90
5	105
6	110

Thuy Anh runs a small flower shop in the town of Florabunda. She is debating whether she should extend her hours of operation. Thuy Anh figures that her sales revenue will depend on the number of hours the flower shop is open as shown in the table above. She would have to hire a worker for those hours at a wage rate of \$16 per hour.

- 40) *Refer to Table 1-2.* Using marginal analysis, how many hours should Thuy Anh extend her flower shop's hours of operations?  
 A) 2 hours      B) 3 hours      C) 4 hours      D) 5 hours      E) 6 hours

Answer: C

Diff: 3      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 41) *Refer to Table 1-2.* What is Thuy Anh's marginal benefit if she decides to stay open for three hours instead of two hours?  
 A) \$0      B) \$20      C) \$25      D) \$45      E) \$70

Answer: C

Diff: 2      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 42) *Refer to Table 1-2.* What is Thuy Anh's marginal cost if she decides to stay open for three hours instead of two hours?  
 A) \$0      B) \$16      C) \$25      D) \$32      E) \$45

Answer: B

Diff: 2      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 43) Soo Jin shares a one-bedroom apartment with her classmate. Her share of the rent is \$700 per month. She is considering moving to a studio apartment which she will not have to share with anyone. The studio apartment rents for \$950 per month. Recently, you ran into Soo Jin on campus and she tells you that she has moved into the studio apartment. Soo Jin is as rational as any other person. As an economics major, you rightly conclude that  
 A) Soo Jin did not have a choice; her roommate was a slob.  
 B) Soo Jin figures that the additional benefit of having her own place (as opposed to sharing) is at least \$250.

- C) Soo Jin figures that the benefit of having her own place (as opposed to sharing) is at least \$950.
- D) the cost of having one's own space outweighs the benefits.

Answer: B

Diff: 2 Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 44) If the marginal cost of keeping a doctor's office open one additional hour per day is \$200, then the doctor should keep the office open for one extra hour
- A) only if the marginal benefit she receives is greater than \$200 plus an acceptable profit margin.
  - B) as long as the marginal benefit she receives is just equal to or greater than \$200.
  - C) as long as the marginal cost does not rise.
  - D) until the marginal benefit she receives reaches zero.

Answer: B

Diff: 2 Page Ref: 7-8

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 45) Consider the following statements:
- a. Consumers buy more MP3 players from an electronics store that sells MP3 players at a lower price than other rival electronics stores in the area.
  - b. Schools take steps to increase security since they believe it is more costly to allow vandalism than to hire additional security guards.
  - c. Citrus growers produce more oranges when the selling price of oranges falls.

Which of the above statements demonstrates that economic agents respond to incentives?

- A) a only.
- B) b only.
- C) c only.
- D) a and b.
- E) a, b, and c.

Answer: D

Diff: 2 Page Ref: 5

Topic: *People Respond to Economic Incentives*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 46) A restaurant sells a large soft drink at a fixed price of \$1.79. A term used by economists to describe the money received from the sale of an additional large soft drink is
- A) marginal revenue.
  - B) gross earnings.
  - C) pure profit.
  - D) net benefit.

Answer: A

Diff: 1 Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



- 47) The \_\_\_\_\_ the sale of an additional unit of a product is a marginal benefit to the firm.
- A) revenue received from
  - B) extra cost of
  - C) total value of
  - D) sales tax on

Answer: A

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 48) Which of the following is an example of a "how much" decision?
- A) Dinah's Diner is only open for breakfast and lunch. Dinah is trying to decide whether to open for dinner as well.
  - B) Zander has torn up his front yard and is debating whether to plant grass or install a rock garden.
  - C) You received a nice birthday check from your grandmother and are deciding on whether to spend it on a trip to New York or a trip to San Francisco.
  - D) Sergio quit his job to go back to school full time.

Answer: A

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 49) Pookie's Pinball Palace restores old Pinball machines. Pookie has just spent \$300 purchasing and cleaning a 1960s-era machine which he expects to sell for \$2,000 once he is finished with the restoration. After having spent \$300, Pookie discovers that he will need to rewire the entire machine at a cost of \$1,100 in order to finish the restoration. Alternatively, he can sell the machine "as is" now for \$1,000. What is his marginal benefit if he sells the machine "as is" now?
- A) \$300
  - B) \$900
  - C) \$1,000
  - D) The marginal benefit cannot be determined.

Answer: C

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 50) Pookie's Pinball Palace restores old Pinball machines. Pookie has just spent \$300 purchasing and cleaning a 1960s-era machine which he expects to sell for \$2,000 once he is finished with the restoration. After having spent \$300, Pookie discovers that he will need to rewire the entire machine at a cost of \$1,100 in order to finish the restoration. Alternatively, he can sell the machine "as is" now for \$1,000. What is the marginal cost of completing the task?
- A) \$300
  - B) \$800
  - C) \$1,100
  - D) \$1,400

Answer: C

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 51) Pookie's Pinball Palace restores old Pinball machines. Pookie has just spent \$300 purchasing and cleaning a 1960s-era machine which he expects to sell for \$2,000 once he is finished with the restoration. After having spent \$300, Pookie discovers that he will need to rewire the entire machine at a cost of \$1,100 in order to finish the restoration. Alternatively, he can sell the machine "as is" now for \$1,000. What should he do?

- A) He should sell the machine now to make the most profit.
- B) It does not matter what he does; he is going to take a loss on his project.
- C) He should rewire the machine, complete the task and then sell the machine.
- D) He should have never purchased the machine because he has already spent too much time on it and has not been paid for that time.

Answer: A

Diff: 3 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### Scenario 1-2

Suppose a hat manufacturer currently sells 2,000 hats per week and makes a profit of \$5,000 per week. The plant owner observes, "Although the last 300 hats we produced and sold increased our revenue by \$1,000 and our costs by \$1,100, we are still making an overall profit of \$5,000 per week so I think we're on the right track. We are producing the optimal number of hats."

- 52) *Refer to Scenario 1-1.* Using marginal analysis terminology, another economic term for the incremental revenue received from the sale of the last 300 hats is

- A) gross earnings.
- B) marginal revenue.
- C) sales revenue.
- D) gross profit.

Answer: B

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 53) *Refer to Scenario 1-2.* Using marginal analysis terminology, another economic term for the incremental cost of producing the last 300 hats is

- A) marginal cost.
- B) operating cost.
- C) explicit cost.
- D) Any of the above terms are correct.

Answer: A

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 54) **Refer to Scenario 1–2.** Had the firm not produced and sold the last 300 hats, would its profit be higher or lower, and if so by how much?

A) Its profit will be \$1,100 higher.                      B) Its profit will be \$100 higher.  
C) Its profit will be \$100 lower.                      D) Its profit will be \$1,000 lower.

Answer: B

Diff: 2      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

**Table 1–3**

Hours Open	Total Revenue (dollars)
1	\$70
2	120
3	160
4	184
5	200
6	210

Santiago runs a comic book store in the town of East Arbor. He is debating whether he should extend his hours of operation. Santiago figures that his sales revenue will depend on the number of hours the store is open as shown in the table above. He would have to hire a worker for those hours at a wage rate of \$18 per hour.

- 55) **Refer to Table 1–3.** Using marginal analysis, determine how many hours should Santiago extend his store's hours of operations?

A) 2 hours                      B) 3 hours                      C) 4 hours                      D) 5 hours                      E) 6 hours

Answer: C

Diff: 3      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 56) **Refer to Table 1–3.** What is Santiago's marginal benefit if he decides to stay open for two hours instead of one hour?

A) \$40                      B) \$50                      C) \$120                      D) \$190

Answer: B

Diff: 2      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 57) **Refer to Table 1–3.** What is Santiago's marginal cost if he decides to stay open for two hours instead of one hour?

A) \$18                      B) \$36                      C) \$38                      D) \$102

Answer: A

Diff: 2      Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 58) Damian shares a small food truck with his sister. His share of the expenses is \$500 per month. He has decided to get his own, newer food truck which he will not have to share with anyone. His expenses for the newer truck are \$1,400 per month. Damian is as rational as any other person. As an economics major, you rightly conclude that
- A) Damian cannot afford the newer truck and will have to go back to sharing a truck with his sister.
  - B) Damian figures that the additional benefit of having his own truck (as opposed to sharing) is at least \$900.
  - C) Damian figures that the benefit of having his own truck (as opposed to sharing) is at least \$1,400.
  - D) the cost of having one's own truck outweighs the benefits.

Answer: B

Diff: 2 Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 59) Scarcity refers to a situation in which unlimited wants exceed the limited resources available to fulfill those wants.

Answer: TRUE

Diff: 1 Page Ref: 4

Topic: *Scarcity*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 60) Scarcity is a problem that will eventually disappear as technology advances.

Answer: FALSE

Diff: 1 Page Ref: 4

Topic: *Scarcity*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 61) An economic model is a simplified version of reality used to analyze real-world economic situations.

Answer: TRUE

Diff: 1 Page Ref: 4

Topic: *Economic Models*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 62) The sales revenue a seller receives from the sale of an additional unit of goods is called the marginal benefit.

Answer: TRUE

Diff: 1 Page Ref: 7

Topic: *Optimal Decisions Are Made at the Margin*

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 63) Optimal decisions are made at the point where marginal cost equals zero.

Answer: FALSE

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 64) If it costs Sinclair \$300 to produce 3 suede jackets and \$420 to produce 4 suede jackets, then the difference of \$120 is the marginal cost of producing the 4th suede jacket.

Answer: TRUE

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 65) Suppose the extra cost for a doctor to keep his office open for one extra hour is \$200. Then, the doctor should stay open for the extra hour even if he can generate additional revenue of \$200 for that hour.

Answer: TRUE

Diff: 2 Page Ref: 7-8

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 66) All economic questions arise from the fact that resources are unlimited.

Answer: FALSE

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 67) Even if the population declines, scarcity will still exist.

Answer: TRUE

Diff: 1 Page Ref: 4

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 68) The term "market" refers to trading arrangements by which buyers and sellers come together.

Answer: TRUE

Diff: 1 Page Ref: 5

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 69) The additional cost to a producer of hiring an additional unit of labor is called the marginal cost.

Answer: TRUE

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

70) Marginal benefit refers to the additional benefit that your activity provides to you.

Answer: TRUE

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

71) If it costs Danitra \$225 to create 4 necklaces and \$275 to create 5 necklaces, then \$50 is the marginal cost of producing the 5th necklace.

Answer: TRUE

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

72) Suppose the extra cost to a doctor of keeping his office open on Saturdays is \$1,200. Then, the doctor should stay open on Saturdays if keeping the office open brings in additional revenue of \$1,200 or more.

Answer: TRUE

Diff: 2 Page Ref: 7-8

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

73) Explain the economic assumption that "people are rational."

Answer: "People are rational" means that economists assume consumers and firms will use all available information as they act to achieve their goals. Rational individuals weigh the benefits and costs of each action, and they choose an action only if the benefits exceed the costs.

Diff: 2 Page Ref: 5

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

74) Explain the economic idea that "people respond to incentives."

Answer: Human beings act from a variety of motives, including religious belief, envy, and compassion. "People respond to incentives" means that people will act if they feel it is in their best economic interest to do so.

Diff: 2 Page Ref: 5

Topic: People Respond to Economic Incentives

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

75) What is meant by the statement that "optimal decisions are made at the margin"?

Answer: In economics, the word "marginal" means "extra" or "additional." Economists reason that the optimal decision is to continue any activity up to the point where the marginal benefit equals the marginal cost, so optimal decisions are made at the point where the extra benefit received from an activity is equal to the extra cost associated with that activity.

Diff: 2 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

76) Assume that a doctor can earn an additional \$20,000 of revenue each year from keeping his office open for one additional hour per week. What must the additional cost of keeping the office open this additional hour per week be to make staying open for the extra hour economically rational?

Answer: The additional cost of staying open for one additional hour per week must be no more than \$20,000 for the year to make staying open for the extra hour economically rational.

Diff: 2 Page Ref: 7-8

Topic: People Are Rational

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

77) What is an economic model?

Answer: An economic model is a simplified version of reality used to analyze real-world economic situations.

Diff: 1 Page Ref: 5

Topic: Economic Models

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

78) What is a marginal benefit?

Answer: Marginal benefit is the additional benefit received from continuing with an activity.

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

79) What is a marginal cost?

Answer: Marginal cost is the additional cost associated with continuing with an activity.

Diff: 1 Page Ref: 7

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 80) Suppose a doctor can earn an additional \$25,000 in revenue per year by keeping her office open on Sundays. At what additional cost would keeping the office open on Sundays not be considered economically rational?

Answer: If the additional cost of keeping the office open on Sundays exceeds \$25,000 per year, the decision would not be economically rational.

Diff: 2 Page Ref: 7–8

Topic: Optimal Decisions Are Made at the Margin

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

## 1.2 The Economic Problem That Every Society Must Solve

- 1) The three fundamental questions that any economy must address are

- A) What will be the prices of goods and services; how will these goods and services be produced; and who will receive them?
- B) What goods and services to produce; how will these goods and services be produced; and who receives them?
- C) Who gets jobs; what wages do workers earn; and who owns what property?
- D) How much will be saved; what will be produced; and how can these goods and services be fairly distributed?

Answer: B

Diff: 1 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 2) The idea that because of scarcity, producing more of one good or service means producing less of another good or service refers to the economic concept of

- A) optimization.
- B) efficiency.
- C) trade-off.
- D) equity.

Answer: C

Diff: 1 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 3) Society faces a trade-off in all of the following situations *except*

- A) when deciding who will receive the goods and services produced.
- B) when deciding what goods and services will be produced.
- C) when deciding how goods and services will be produced.
- D) when some previously unemployed workers find jobs.

Answer: D

Diff: 2 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



4) Which of the following statements is *true*?

- A) Anytime you have to decide which action to take you are experiencing economic equity.
- B) Trade-offs do not apply when the consumers purchase a product for which there is excess supply, such as a stock clearance sale.
- C) Every individual, no matter how rich or poor, is faced with making trade-offs.
- D) Economics is a social science that studies the trade-offs we are forced to make because resources are unlimited.

Answer: C

Diff: 2 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

5) Which of the following is *not* an example of an economic trade-off that a firm has to make?

- A) whether it is cheaper to produce with more machines or with more workers
- B) whether it is to outsource the production of a good or service
- C) whether or not consumers will buy its products
- D) whether it should produce more of its product

Answer: C

Diff: 1 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

6) The highest valued alternative that must be given up to engage in an activity is the definition of

- A) economic equity.
- B) marginal benefit.
- C) opportunity cost.
- D) marginal cost.

Answer: C

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

7) The Coffee Nook, a small cafe near campus, sells cappuccinos for \$2.50 and Russian tea cakes for \$1.00 each. What is the opportunity cost of buying a cappuccino?

- A) 2 1/2 Russian tea cakes
- B) 2/5 of a Russian tea cake
- C) \$2.50
- D) \$1.00

Answer: A

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) The Coffee Nook, a small cafe near campus, sells cappuccinos for \$2.50 and Russian tea cakes for \$1.00 each. What is the opportunity cost of buying a Russian tea cake?

A) 2 1/2 cappuccinos  
B) 2/5 of a cappuccino  
C) \$2.50  
D) \$1.00

Answer: B

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) Arlene quits her \$125,000-a-year job to take care of her ailing parents. What is the opportunity cost of her decision?

A) zero, since she will no longer be earning a salary  
B) It depends on the "going rate" for home-care providers.  
C) at least \$125,000  
D) the value she attributes to the satisfaction she receives from taking care of her parents

Answer: C

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) The distribution of income primarily determines which of the fundamental economic questions?

A) What goods and services are to be produced?  
B) How the goods and services are to be produced?  
C) Who will receive the goods and services produced?  
D) How to plan the economy?

Answer: C

Diff: 2 Page Ref: 9

Topic: Who Will Receive the Goods and Services Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 11) Automobile manufacturers produce a range of automobiles such as sports utility vehicles, luxury sedans, pickup trucks and compact cars. What fundamental economic question are they addressing by making this range of products?

A) How to produce goods that consumers want?  
B) Why produce a variety of automobiles?  
C) What to produce?  
D) Who to produce automobiles for?

Answer: C

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

12) Consider the following economic agents:

- a. the government
- b. consumers
- c. producers

Who, in a centrally planned economy, decides what goods and services will be produced with the scarce resources available in that economy?

- A) the government
- B) producers
- C) consumers
- D) consumers and producers
- E) the government, consumers and producers

Answer: A

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

13) The decision about what goods and services will be produced made in a market economy is made by

- A) lawmakers in the government voting on what will be produced.
- B) workers deciding to produce only what the boss says must be produced.
- C) producers deciding what society wants most.
- D) consumers and firms choosing which goods and services to buy or produce.
- E) consumers dictating to firms what they need most.

Answer: D

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

14) Which of the following statements about the economic decisions consumers, firms, and the government have to make is *false*?

- A) Governments face the problem of scarcity in making economic decisions.
- B) Only individuals face scarcity; firms and the government do not.
- C) Both firms and individuals face scarcity.
- D) Each faces the problem of scarcity which necessitates trade-offs in making economic decisions.

Answer: B

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

15) Why is it necessary for all economic systems to not only provide people with goods and services, but also restrict them from getting as much of these goods and services as they wish?

- A) Failure to do this could reduce the efficiency of the system by producing some goods and services that are not as highly valued as others.
- B) Failure to do this could lead to an inequitable allocation of goods and services produced.
- C) Failure to do this could lead to drastic shortages of good and services.
- D) Failure to do this could reduce efficiency and leads to an inequitable allocation of output.

Answer: A

Diff: 3 Page Ref: 9

Topic: Who Will Receive the Goods and Services Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

16) Who receives the most of what is produced in a market economy?

- A) lawmakers and other politically favored groups
- B) those who are willing and able to buy them
- C) everyone receives an equal amount
- D) people who earn the highest incomes

Answer: B

Diff: 1 Page Ref: 9

Topic: Who Will Receive the Goods and Services Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

17) How are the fundamental economic decisions determined in North Korea?

- A) Individuals, firms, and the government interact in a market to make these economic decisions.
- B) These decisions are made by the country's elders who have had much experience in answering these questions.
- C) The government decides because North Korea is a centrally planned economy.
- D) The United Nations decides because North Korea is a developing economy.

Answer: C

Diff: 1 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

18) How are the fundamental economic questions answered in a market economy?

- A) The government alone decides the answers.
- B) Individuals, firms, and the government interact in markets to decide the answers to these questions.
- C) Households and firms interact in markets to decide the answers to these questions.
- D) Large corporations alone decide the answers.

Answer: C

Diff: 2 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

19) Which of the following is a problem inherent in centrally planned economies?

- A) Households and firms make poor decisions in choosing how resources are allocated.
- B) There is too little production of low-cost, high-quality goods and services.
- C) Production managers are more concerned with satisfying consumer wants than with satisfying government's orders.
- D) Exports tend to exceed imports.

Answer: B

Diff: 2 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 20) All of the following contributed to the downfall of the Soviet Union in 1991 *except*
- A) public dissatisfaction with low living standards and political repression.
  - B) an inability to produce low-cost consumer goods that households wanted.
  - C) lack of high-quality goods and services.
  - D) lack of a strong dictator who can coordinate economic activities.

Answer: D

Diff: 2 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 21) \_\_\_\_\_ is a situation in which a good or service is produced at the lowest possible cost.
- A) Allocative efficiency
  - B) Productive efficiency
  - C) Equity
  - D) Optimal marginalism

Answer: B

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 22) Productive efficiency is achieved when
- A) firms add a low profit margin to the goods and services they produce.
  - B) firms produce the goods and services that consumers value most.
  - C) firms produce goods and services at the lowest cost.
  - D) there are no shortages or surpluses in the market.

Answer: C

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 23) When production reflects consumer preferences, \_\_\_\_\_ occurs.
- A) allocative efficiency
  - B) productive efficiency
  - C) equity
  - D) efficient central planning

Answer: A

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 24) Allocative efficiency is achieved when firms produce goods and services
- A) at the lowest possible cost.
  - B) that consumers value most.
  - C) at the lowest opportunity cost.
  - D) at a marginal cost of zero.

Answer: B

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 25) Markets promote
- A) equity and competition.
  - B) voluntary exchange and equality.
  - C) equity and equality.
  - D) competition and voluntary exchange.

Answer: D

Diff: 2 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 26) Which of the following statements is true about competition in a market?
- A) Competition forces firms to outsource the production of their labor-intensive products.
  - B) Competition forces firms to undercut their selling price, thus benefiting consumers who will be able to purchase products at the lowest price possible.
  - C) Competition forces firms to produce and sell products as long as the marginal benefit to consumers exceeds the marginal cost of production.
  - D) Competition forces firms to add only low profit margins to their costs of production.

Answer: C

Diff: 2 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 27) \_\_\_\_\_ increases economic efficiency because it forces firms to produce and sell goods and services as long as the additional benefit to consumers is greater than the additional cost of production.
- A) Competition
  - B) Voluntary exchange
  - C) Equity
  - D) A centrally planned economy

Answer: A

Diff: 1 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

28) Which of the following generates productive efficiency?

- A) competition among sellers
- B) competition among buyers
- C) government inspectors
- D) government production rules and regulations

Answer: A

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

29) Voluntary exchange between buyers and sellers generates \_\_\_\_\_ in a market economy.

- A) scarcity
- B) allocative efficiency
- C) productive efficiency
- D) equity

Answer: B

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

30) Which of the following is a result of a market economy?

- A) environmental protection
- B) an equal income distribution
- C) agreement on equity
- D) voluntary exchange

Answer: D

Diff: 1 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

31) Political candidates often hold fund raisers by charging "per plate" for dinner. Wendy purchased four tickets to a \$1,000 per plate dinner for a local city council candidate. Is this transaction economically efficient?

- A) No, political candidates should never be allowed to overcharge for a fund raising dinner.
- B) Yes, it was a voluntary exchange that benefited both parties.
- C) No, Wendy paid too much for four dinners.
- D) Yes, it is efficient only from the perspective of the candidate but not from the perspective of Wendy.

Answer: B

Diff: 2 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 32) In economics, the term "equity" means
- A) everyone has an equal standard of living.
  - B) the hardest working individuals consume all they want.
  - C) only elected officials have high standards of living.
  - D) economic benefits are distributed fairly.

Answer: D

Diff: 1 Page Ref: 11

Topic: Equity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 33) Which of the following is motivated by an equity concern?
- A) Some states have transferred funds to food bank programs in order to increase benefits to lower-income families.
  - B) Following the implementation of subsidies for energy conservation, household demand for rooftop solar panels increased quite significantly in California.
  - C) The United Network for Organ Sharing advocates a system of rationing scarce kidneys that would favor young patients over old in an effort to wring more life out of donated organs.
  - D) The United States offers patent protection to pharmaceutical manufacturers to prevent others from duplicating their products.

Answer: A

Diff: 3 Page Ref: 11

Topic: Equity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 34) Which of the following is motivated by an efficiency concern?
- A) In December 2006, the Bush administration restarted a short-term housing assistance program for victims of Hurricane Katrina.
  - B) Each year, the University of Notre Dame conducts a lottery to parcel out the 30,000 seats available to contributors, former athletes and parents in the 80,000-seat stadium.
  - C) The United Network for Organ Sharing advocates a system of rationing scarce kidneys that would favor young patients over old in an effort to wring more life out of donated organs.
  - D) The federal government's housing choice voucher program assists very low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing in the private market.

Answer: C

Diff: 3 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



35) Which of the following is an example of an efficiency–equity trade–off faced by economic agents?

- A) According to an article by in the American Journal of Public Health by Edward Kaplan and Michael Merson of Yale University School of Medicine, the federal government's current method of allocating HIV–prevention resources is not cost–effective. Instead of allocating resources to states in proportion to reported AIDS cases, resources should flow first to those activities that prevent more infections per dollar and then to less and less effective combinations of programs and populations until funds are exhausted, even if it means that some populations would be left without any prevention services.
- B) Concerned about the falling birth rate, the French government has pledged more money for families with three children, in an effort to encourage working women to have more babies.
- C) Some U.S. colleges are actively recruiting foreign students for their technology –based programs.
- D) All New York City art museums are considering adopting a free–admission policy for local residents one weekend per month.

Answer: A

Diff: 3 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

36) Which of the following correctly describes the relationship between economic efficiency and economic equity?

- A) They are both automatically achieved in a free market economy.
- B) They always call for opposite outcomes.
- C) There is no conflict between the two goals.
- D) There is often a trade–off between the two.

Answer: D

Diff: 2 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

37) Allocative efficiency best explains \_\_\_\_\_, and productive efficiency best explains \_\_\_\_\_.

- A) how something will be produced; when something will be produced
- B) when something will be produced; why something will be produced
- C) why something will be produced; what will be produced
- D) what will be produced; how something will be produced

Answer: D

Diff: 2 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

38) Trina's Tropical Fish Store sells goldfish for \$2 each and angelfish for \$10 each. What is the opportunity cost of buying a goldfish?

- A) 5 angelfish
- B) 1/5 of an angelfish
- C) \$10
- D) \$2

Answer: A

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

39) Trinh quits his \$80,000-a-year job to become a full-time volunteer at a museum. What is the opportunity cost of his decision?

- A) 0 since he will no longer be earning a salary
- B) depends on the "going rate" of museum employees
- C) at least \$80,000
- D) the value he attributes to the joy of working at a museum

Answer: C

Diff: 1 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

40) Jewelry manufacturers produce a range of products such as rings, necklaces, bracelets, and brooches. What fundamental economic question are they addressing by offering this range of items?

- A) How to produce goods that consumers want?
- B) Why produce a variety of items?
- C) What to produce?
- D) Who to produce the items for?

Answer: C

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

41) Consider the following economic agents:

- a. the government
- b. consumers
- c. producers

Who, in a market economy, decides what goods and services will be produced with the scarce resources available in that economy?

- A) the government
- B) producers
- C) consumers
- D) consumers and producers
- E) the government, consumers and producers

Answer: D

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

42) In a modern mixed economy, who decides what goods and services will be produced?

- A) only the producers
- B) only consumers
- C) only the government
- D) all of the above

Answer: D

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

43) How are the fundamental economic decisions determined in China?

- A) Individuals, firms, and the government interact in a market to make these economic decisions.
- B) These decisions are made by the country's elders who have had much experience in answering these questions.
- C) The government decides because China is a centrally planned economy.
- D) The United Nations decides because China is a developing economy.

Answer: A

Diff: 1 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

44) When every good or service is produced up to the point where the last unit provides \_\_\_\_\_, allocative efficiency occurs.

- A) a marginal benefit to society equal to the marginal cost of producing it
- B) a marginal benefit to society greater than the marginal cost of producing it
- C) a marginal benefit to society less than the marginal cost of producing it
- D) a marginal benefit to society equal to zero

Answer: A

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

45) Voluntary exchange \_\_\_\_\_ economic efficiency because neither the buyer nor the seller would agree to a trade unless \_\_\_\_\_.

- A) increases; they both benefit
- B) increases; only one party benefits
- C) decreases; neither benefit
- D) decreases; they both benefit

Answer: A

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

46) All centrally planned economies

- A) have been political dictatorships.
- C) began as mixed economies.

- B) started out as market economies.
- D) have become mixed economies.

Answer: A

Diff: 1 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

47) Mr. Peabody chooses to invest in companies that produce goods and services at the lowest possible cost. Mr. Peabody is investing in companies that are

- A) allocatively efficient.
- C) guaranteed to make a profit.

- B) productively efficient.
- D) all of the above.

Answer: B

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

48) Mr. Peabody chooses to invest in companies that produce goods and services based on consumer preferences. Mr. Peabody is investing in companies that are attempting to be

- A) allocatively efficient.
- C) guaranteed to make a profit.

- B) productively efficient.
- D) all of the above.

Answer: A

Diff: 1 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

49) The town of Harmonia gives away all 500 tickets to its annual Founder's Day Free Concert-in-the-Park to local residents. Each year, more than 500 people wish to attend the concert, so some of the residents who receive the free tickets sell them for as much as \$75 each. Is a transaction where someone pays a resident \$75 for a "free ticket" economically efficient?

- A) No, people should never be allowed to sell items they received for free.
- B) Yes, it was a voluntary exchange that benefited both parties.
- C) No, the buyer paid too much for the ticket.
- D) Yes, it is efficient only from the perspective of the seller and not from the perspective of the buyer.

Answer: B

Diff: 2 Page Ref: 11

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### Article Summary

In an August 2013 speech from the Lincoln Memorial, President Obama was expected to emphasize that increased economic equality is needed to improve racial equality. Economic gaps based on race have endured for 50 years, with the differences in unemployment rates between blacks and whites remaining virtually unchanged and the gap in wealth actually increasing. "If you look at 50 years after the 1960s civil rights movement, the most stubborn and persistent challenge when it comes to the nation's racial challenge remains in the areas of economics and wealth," said Marc Morial, president of the National

**Urban League.**

**Source:** Zachary A. Goldfarb, "For Obama, 50 years after historic march, economic equality the path to racial justice," *Washington Post*, August 17, 2013.

- 50) *Refer to the Article Summary.* The article mentions increased economic equality is needed in terms of wealth, and for some people this means a more equitable distribution of wealth. What is meant by a more equitable distribution of wealth?

- A) a more allocatively efficient distribution of wealth
- B) a more productively efficient distribution of wealth
- C) a more fair distribution of wealth
- D) wealth distributed based on income levels

Answer: C

Diff: 2 Page Ref: 11

Topic: Equity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 51) *Refer to the Article Summary.* The article mentions increased economic equality is needed in terms of wealth, and for some people this means a more equitable distribution of wealth. Would an equitable distribution of wealth necessarily be the most efficient distribution of wealth?

- A) Yes, equitable and efficient are two different words which have the same definition.
- B) Yes, in order for the distribution to be equitable, it must also be efficient.
- C) No, it is impossible to have an economically efficient distribution which is also an equitable distribution.
- D) No, an economically efficient distribution of wealth would not necessarily be equitable.

Answer: D

Diff: 2 Page Ref: 11

Topic: Equity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 52) The government makes all economic decisions in a mixed economy.

Answer: FALSE

Diff: 1 Page Ref: 10

Topic: Mixed Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 53) When voluntary exchange takes place, both parties gain from the exchange.

Answer: TRUE

Diff: 1 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 54) A college must decide if it wants to offer more Internet-based classes. This decision involves answering the economic question of "what to produce."

Answer: TRUE

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 55) One desirable outcome of a market economy is that it leads to a more equitable distribution of income.

Answer: FALSE

Diff: 1 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 56) The government makes all economic decisions in a market economy.

Answer: FALSE

Diff: 1 Page Ref: 10

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 57) When voluntary exchange takes place, neither party gains from the exchange.

Answer: FALSE

Diff: 1 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 58) A college must decide if it wants to offer more adult literacy classes. This decision involves answering the economic question of "for whom to produce."

Answer: TRUE

Diff: 1 Page Ref: 9

Topic: What Goods and Services Will Be Produced?

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 59) In a centrally planned economy, the households and firms decide how economic resources will be allocated.

Answer: FALSE

Diff: 1 Page Ref: 9

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

60) What is equity, and how does it differ from efficiency?

Answer: Equity refers to the fair distribution of economic benefits. In economics, efficiency refers to least cost production (productive efficiency) and producing according to human preferences (allocative efficiency).

Diff: 2 Page Ref: 11

Topic: Equity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

61) What is opportunity cost?

Answer: Opportunity cost refers to the highest-valued alternative that must be given up to engage in an activity. For example, the opportunity cost of taking this economics class is what you are giving up to take the class, which may be taking another class such as accounting or psychology, working extra hours at your job, or extra sleep (whichever is your highest-valued alternative).

Diff: 2 Page Ref: 8

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

62) Define productive efficiency. Does productive efficiency imply allocative efficiency? Explain.

Answer: Productive efficiency is an efficiency criterion that describes a situation in which goods and services are produced at the lowest possible cost. It does not imply allocative efficiency which is a criterion associated with producing goods and services that consumers value most. For example, a manufacturer may be able to produce typewriters at the lowest possible cost of say, \$200 but this does not necessarily mean that consumers are willing to pay \$200 for a typewriter.

Diff: 3 Page Ref: 11

Topic: Efficiency

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

63) What is a centrally planned economy?

Answer: A centrally planned economy is an economy in which the government decides how economic resources will be allocated.

Diff: 3 Page Ref: 9

Topic: Centrally Planned Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

64) What is voluntary exchange?

Answer: Voluntary exchange is a situation that occurs in markets when both the buyer and seller of a product are made better off by the transaction.

Diff: 2 Page Ref: 8

Topic: Trade-offs

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

65) What is a mixed economy?

Answer: A mixed economy is an economy in which most economic decisions result from the interaction of buyers and sellers in markets but in which the government plays a significant role in the allocation of resources.

Diff: 3 Page Ref: 10

Topic: Market Economies

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### 1.3 Economic Models

1) Economic models do all of the following *except*

- A) answer economic questions.
- B) portray reality in all its minute details.
- C) make economic ideas explicit and concrete for use by decision makers.
- D) simplify some aspect of economic life.

Answer: B

Diff: 1 Page Ref: 12

Topic: Economic Models

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

2) All of the following are part of an economic model *except*

- A) assumptions.
- B) hypotheses.
- C) data.
- D) opinions.

Answer: D

Diff: 1 Page Ref: 12

Topic: Economic Models

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

3) Which of the following statements about positive economic analysis is *false*?

- A) Positive analysis uses an economic model to estimate the costs and benefits of different course of actions.
- B) There is much more disagreement among economists over normative economic analysis than over positive economic analysis.
- C) There is much more disagreement among economists over positive economic analysis than over normative economic analysis.
- D) Unlike normative economic analysis, positive economic analysis can be tested.

Answer: C

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



4) Which of the following is a positive economic statement?

- A) The standard of living in the United States should be higher.
- B) If the price of iPhones falls, a larger quantity of iPhones will be purchased.
- C) The government should revamp the health care system.
- D) The U.S. government should not have bailed out U.S. auto manufacturers.

Answer: B

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

5) Which of the following is a positive economic statement?

- A) People should not buy SUVs.
- B) The government should mandate electric automobiles.
- C) Scarcity necessitates that people make trade-offs.
- D) Foreign workers should not be allowed to work for lower wages than the citizens of a country.

Answer: C

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

6) Which of the following is a normative economic statement?

- A) Rising global demand for coal has led to increases in the price of coal.
- B) With rising mortgage rates and rising unemployment rates, the number of unsold homes has increased.
- C) The state of Texas is considering increasing funds for light-rail development to promote the use of public transportation.
- D) Pharmaceutical manufacturers should not be allowed to patent their products so prescription drugs would be more affordable.

Answer: D

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

7) Which of the following is a normative economic statement?

- A) The price of gasoline is too high.
- B) The current high price of gasoline is the result of strong worldwide demand.
- C) When the price of gasoline rises, the quantity of gasoline purchased falls.
- D) When the price of gasoline rises, transportation costs rise.

Answer: A

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) Which of the following questions or statements regarding medical school is normative?
- A) How do changes in expected future incomes affect the decisions of medical students about which specialty to choose?
  - B) Medical students who enter specialized fields make a larger contribution to society than do student who enter primary care.
  - C) What role does tuition play in a student's decision about whether to attend medical school?
  - D) Have tuition increases had a large effect or a small effect on the number of applications to medical school?

Answer: B

Diff: 2 Page Ref: 14–15

Topic: Positive and Normative Analysis

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) The economic analysis of minimum wage involves both normative and positive analysis. Consider the following consequences of a minimum wage:
- a. The minimum wage law causes unemployment.
  - b. A minimum wage law benefits some groups and hurts others.
  - c. In some cities such as San Francisco and New York, it would be impossible for low-skilled workers to live in the city without minimum wage laws.
  - d. The gains to winners of a minimum wage law should be valued more highly than the losses to losers because the latter primarily comprises businesses.

Which of the consequences above are positive statements and which are normative statements?

- A) a, b, and c are positive statements and d is a normative statement.
- B) a and b are positive statements, c and d are normative statement.
- C) Only a is a positive statement, b, c, and d are normative statements.
- D) a and c are positive statements, b and d are normative statements.

Answer: B

Diff: 2 Page Ref: 14

Topic: Positive and Normative Analysis

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) Which of the following is part of an economic model?
- A) norms
  - B) hypotheses
  - C) opinions
  - D) preferences of economic agents

Answer: B

Diff: 1 Page Ref: 12

Topic: Economic Models

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

11) Which of the following is a positive economic statement?

- A) The standard of living in the United States is too low.
- B) If the price of beef falls, a larger quantity of it will be bought.
- C) The government should implement a national consumption tax.
- D) The U.S. government should increase regulations on the banking industry.

Answer: B

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

12) Which of the following is a positive economic statement?

- A) U.S. citizens should only buy products which are produced in the United States.
- B) The government should ban the production and sale of incandescent light bulbs.
- C) Raising the tax on gasoline raises the selling price of gasoline.
- D) The government should revamp its immigration policies.

Answer: C

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

13) Which of the following is a normative economic statement?

- A) Rising corn prices have increased the price of corn-based ethanol.
- B) With rising home prices and falling mortgage interest rates, the amount of home foreclosures has decreased.
- C) The federal government is considering increasing regulations on the use of fossil fuels to promote the use of wind power.
- D) Farmers should not be allowed to grow and sell genetically-modified crops.

Answer: D

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Ethical understanding and reasoning

14) Which of the following is a normative economic statement?

- A) The price of wheat is too low.
- B) The current low price of wheat is the result of increased worldwide supply.
- C) When the price of wheat falls, the quantity of wheat purchased rises.
- D) When the price of wheat falls, the cost of wheat-based products falls.

Answer: A

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 15) "An increase in the price of gasoline will increase the demand for hybrid vehicles." This statement is an example of a positive economic statement.

Answer: TRUE

Diff: 1 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 16) "The distribution of income should be left to the market" is an example of a positive economic statement.

Answer: FALSE

Diff: 1 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 17) Positive analysis is concerned with "what ought to be," while normative analysis is concerned with "what is."

Answer: FALSE

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 18) "A decrease in the price of tablet computers will decrease the demand for desktop computers." This statement is an example of a normative economic statement.

Answer: FALSE

Diff: 1 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 19) "The distribution of income should be determined by the government" is an example of a positive economic statement.

Answer: FALSE

Diff: 1 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 20) Policies based on positive economic ideas tend to decrease economic efficiency and reduce equity.

Answer: FALSE

Diff: 2 Page Ref: 13

Topic: Positive and Normative Analysis

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

21) What is the difference between positive economic analysis and normative economic analysis?

Give one example each of a positive and normative economic issue or question or statement.

Answer: Positive economic analysis is concerned with what is. Positive economic analysis reaches conclusions based on verifiable statements. Normative economic analysis, on the other hand, is concerned with what ought to be. Normative analysis reaches conclusions based on opinions. (Students will give many different examples.)

*Diff: 2 Page Ref: 13*

*Topic: Positive and Normative Analysis*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

22) Explain why economics is considered a social science.

Answer: Economics is a social science because it studies the actions of individuals. As a social science, economics considers human behavior, particularly decision-making behavior, in every context.

*Diff: 2 Page Ref: 14*

*Topic: Economics as a Social Science*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

23) What is an economic variable?

Answer: An economic variable is something measurable that can have different values, such as the wages of software programmers.

*Diff: 1 Page Ref: 12*

*Topic: Economic Models*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

24) Which of the following are positive economic statements and which are normative economic statements?

- a. An increase in the price of gasoline will decrease the quantity of gasoline purchased.
- b. The government should eliminate the minimum wage.
- c. All states should raise the minimum wage to at least \$10 per hour.
- d. The government should scrap its current income tax structure in favor of a flat tax.
- e. Unemployment has increased since the onset of the recession.
- f. The government should not bail out investment banks during a financial crisis.

Answer: Statements a and e are positive economic statements. Statements b, c, d, and f are normative economic statements.

*Diff: 2 Page Ref: 13*

*Topic: Positive and Normative Analysis*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

## 1.4 Microeconomics and Macroeconomics

1) Which of the following is a microeconomics question?

- A) How much will be saved and how much will be produced in the entire economy?
- B) What will the level of economic growth be in the entire economy?
- C) What factors determine the price of carrots?
- D) What determines the average price level and inflation?

Answer: C

Diff: 2 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

2) Microeconomics is the study of

- A) how households and firms make choices.
- B) the economy as a whole.
- C) the global economy.
- D) topics such as unemployment, inflation, and economic growth.

Answer: A

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

3) Which of the following is a macroeconomics question?

- A) What determines the inflation rate?
- B) What determines the production of DVDs?
- C) What factors determine the price of carrots?
- D) What determines the wage of auto workers?

Answer: A

Diff: 2 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

4) Macroeconomics is the study of

- A) how households make choices.
- B) how firms make choices.
- C) how households and firms make choices.
- D) the economy as a whole.

Answer: D

Diff: 1 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 5) Which of the following is a microeconomics question?
- A) Why do economies experience periods of high inflation?
  - B) Will Federal Reserve intervention lower the inflation rate?
  - C) Why has growth in the economy increased since the end of the recession?
  - D) Will the merger of American Airlines and US Airways increase or decrease airfares?

Answer: D

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 6) The branch of economics which studies how households and firms interact in markets is called
- A) macroeconomics.
  - B) microeconomics.
  - C) positive economics.
  - D) normative economics.

Answer: B

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 7) Which of the following is a macroeconomics question?
- A) What determines the growth rate of gross domestic product?
  - B) How is the production quantity of snowboards determined?
  - C) What factors determine the price of electronic cigarettes?
  - D) What determines the salaries of Wall Street executives?

Answer: A

Diff: 1 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 8) The branch of economics which studies the behavior of entire economies is called
- A) public economics.
  - B) microeconomics.
  - C) macroeconomics.
  - D) normative economics.

Answer: C

Diff: 1 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 9) When Mr. Peabody decides on the companies to which he will donate his time and money, a \_\_\_\_\_ issue is being addressed.

- A) microeconomic
- B) macroeconomic
- C) positive economic
- D) normative economic

Answer: A

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) Examining the conditions that could lead to a recession in an economy is an example of macroeconomics topic.

Answer: TRUE

Diff: 1 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 11) The decisions Apple makes in determining production levels for its iPhone is an example of a microeconomics topic.

Answer: TRUE

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 12) Examining the conditions that could lead to unemployment in an economy is an example of microeconomics topic.

Answer: FALSE

Diff: 1 Page Ref: 16

Topic: Macroeconomics

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 13) Suppose that to increase sales of hybrid vehicles, auto manufacturers are offering large cash incentives. This is an example of a macroeconomics topic.

Answer: FALSE

Diff: 1 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 14) Which of the following are primarily macroeconomic topics and which are primarily microeconomic topics?

- a. gasoline prices
- b. unemployment
- c. inflation
- d. health care costs
- e. air pollution
- f. economic growth

Answer: b, c, and f are primarily macroeconomic topics.

a, d, and e are primarily microeconomic topics.

Diff: 2 Page Ref: 15–16

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking



## 15) Define microeconomics.

Answer: Microeconomics is the study of how household and firms make choices, how they interact in markets, and how the government attempts to influence their choices.

Diff: 2 Page Ref: 15

Topic: Microeconomics

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

## 1.5 A Preview of Important Economic Terms

## 1) Which of the following statements is true about profit?

- A) Profit refers to the revenue received from the sale of a quantity of goods.
- B) Profit is calculated by multiplying price and quantity sold.
- C) The terms "accounting profit" and "economic profit" can be used interchangeably.
- D) Profit is the difference between revenue and cost.

Answer: D

Diff: 2 Page Ref: 17

Topic: Profit

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

## 2) In economics, the accumulated skills and training that workers have is known as

- A) human capital.
- B) entrepreneurship.
- C) physical capital.
- D) innovation.

Answer: A

Diff: 1 Page Ref: 17

Topic: Human Capital

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

## 3) Which of the following is an example of an activity undertaken by an entrepreneur?

- A) designing your landscaping for your new home
- B) holding a position as the president of a liberal arts college
- C) running for the president of the United States
- D) starting your own pet sitting business

Answer: D

Diff: 1 Page Ref: 16

Topic: Entrepreneur

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

## 4) The machines workers have to work with are considered

- A) human capital.
- B) physical capital.
- C) entrepreneurship.
- D) financial capital.

Answer: B

Diff: 2 Page Ref: 17

Topic: Capital

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 5) Technology is defined as
- A) the process of developing and revising models.
  - B) new innovations and creations.
  - C) the processes used to produce goods and services.
  - D) the process of recycling products.

Answer: C

Diff: 1 Page Ref: 16

Topic: Technology

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 6) Which of the following statements about economic resources is *true*?
- A) Economic resources include financial capital and money.
  - B) Economic resources are also called factors of production.
  - C) Economic resources are used only by businesses.
  - D) All economic resources are man-made.

Answer: B

Diff: 1 Page Ref: 17

Topic: Resources

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 7) Based on projections from the U.S. Census Bureau and the Congressional Budget Office
- A) there will be a significant increase in the demand for health care by the year 2020.
  - B) there will be a significant decrease in the demand for health care by the year 2020.
  - C) there will be no significant change in the demand for health care by the year 2020.
  - D) the change in the supply of health care will more than make up for the change in demand for health care by the year 2020.

Answer: A

Diff: 2 Page Ref: 18-19

Topic: Health Care

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 8) The development of a new good or a new process for making a good is called
- A) an innovation.
  - B) an invention.
  - C) a factor of production.
  - D) a service.

Answer: B

Diff: 1 Page Ref: 16

Topic: Invention

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) In economics, an organization that produces a good or service is called a
- A) firm.
  - B) company.
  - C) business.
  - D) All of the above are correct.

Answer: D

Diff: 1 Page Ref: 16

Topic: Firms

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) Which of the following is an example of an activity undertaken by an entrepreneur?
- A) deciding whether to purchase a gasoline-powered automobile or an electric vehicle
  - B) being appointed as the head of a charitable organization
  - C) running for a seat on the city council
  - D) starting your own cigar manufacturing business

Answer: D

Diff: 1 Page Ref: 16

Topic: Entrepreneur

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 11) All of the following is counted as "capital" in economics *except*
- A) money.
  - B) machine tools.
  - C) factory buildings.
  - D) warehouses.

Answer: A

Diff: 2 Page Ref: 17

Topic: Capital

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 12) A firm's technology may depend on which of the following factors?
- A) the skill of its managers
  - B) the training of its workers
  - C) the speed and efficiency of its equipment
  - D) all of the above

Answer: D

Diff: 1 Page Ref: 16

Topic: Technology

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 13) Households \_\_\_\_\_ factors of production and \_\_\_\_\_ goods and services.
- A) supply; demand
  - B) supply; supply
  - C) demand; supply
  - D) demand; demand

Answer: A

Diff: 1 Page Ref: 17

Topic: Households

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 14) The U.S. Bureau of Labor Statistics predicts that 9 of the 20 fastest growing occupations over the next ten years will be in
- A) the medical field.
  - B) the travel and leisure industry.
  - C) education.
  - D) construction.

Answer: A

Diff: 1 Page Ref: 17

Topic: Human Capital

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 15) According to census figures and the Congressional Budget Office, the number of people aged 65 and older is projected to \_\_\_\_\_ and the number of uninsured people is projected to \_\_\_\_\_ by the year 2020.

A) increase; increase  
C) increase; decrease

B) decrease; increase  
D) decrease; decrease

Answer: C

Diff: 2 Page Ref: 18–19

Topic: Health Care

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

- 16) In the market for factors of production, firms earn income by selling goods and services to households.

Answer: FALSE

Diff: 1 Page Ref: 17

Topic: Resources

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 17) One example of human capital is the amount of skills that you have.

Answer: TRUE

Diff: 1 Page Ref: 17

Topic: Human Capital

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 18) In the market for factors of production, firms earn income by selling factors of production to households.

Answer: FALSE

Diff: 1 Page Ref: 17

Topic: Resources

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 19) One example of physical capital is the amount of savings that you have.

Answer: FALSE

Diff: 1 Page Ref: 17

Topic: Capital

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 20) List the five main factors of production.

Answer: The five main factors of production are labor, capital, human capital, natural resources, and entrepreneurial ability.

Diff: 1 Page Ref: 17

Topic: Resources

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

21) What is the difference between an invention and an innovation?

Answer: An invention is the development of a new good or a new process for making a good. An innovation is the practical application of an invention. Innovation could also refer to any significant improvement in a good or in the means of producing a good.

*Diff: 1 Page Ref: 16*

*Topic: Innovation*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

22) Explain the difference between a firm's revenue and its profit.

Answer: A firm's revenue is the total amount received for selling a good or service. It is calculated by multiplying the price per unit by the number of units sold. A firm's profit is the difference between its revenue and its costs.

*Diff: 1 Page Ref: 16*

*Topic: Revenue*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

23) What is the difference between goods and services?

Answer: Goods are tangible merchandise such as cell phones or automobiles. Services are activities done for others, such as providing medical care or legal advice.

*Diff: 1 Page Ref: 16*

*Topic: Goods and Services*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

24) What is an entrepreneur, and what decisions does an entrepreneur make in a market system?

Answer: An entrepreneur is someone who operates a business. In a market system, entrepreneurs decide what goods and services to produce and how to produce them.

*Diff: 1 Page Ref: 16*

*Topic: Entrepreneur*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

25) What is a firm? What other terms do economists use interchangeably with the term "firm"?

Answer: A firm is an organization that produces a good or service. Firms are also called companies or businesses.

*Diff: 1 Page Ref: 16*

*Topic: Firms*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

## 1.6 Appendix: Using Graphs and Formulas

- 1) If a graph has a line that shows the amount of outsourcing in the last ten years, it is known as
- A) a pie chart.
  - B) a time-series graph.
  - C) a demand curve for outsourcing.
  - D) a supply curve of outsourcing.

Answer: B

Diff: 1 Page Ref: 25

Topic: Graphs

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 2) \_\_\_\_\_ have a horizontal and a vertical axis and are used in economics to illustrate relationships between two economic variables.
- A) Two-dimensional graphs
  - B) One-dimensional graphs
  - C) Pie Charts
  - D) Bar graphs

Answer: A

Diff: 1 Page Ref: 26

Topic: Graphs

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 3) If a straight line passes through the point  $x = 14$  and  $y = 3$  and also through the point  $x = 4$  and  $y = 10$ , the slope of this line is
- A) negative 11 divided by 6.
  - B) seven tenths.
  - C) negative seven tenths.
  - D) 6 divided by 11.

Answer: C

Diff: 2 Page Ref: 27

Topic: Slope

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 4) On a two-dimensional graph, \_\_\_\_\_ allows for the effects of additional variables.
- A) moving along a curve
  - B) shifting curves
  - C) eliminating a curve
  - D) adding an additional curve

Answer: B

Diff: 2 Page Ref: 27

Topic: Graphs

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 5) Which of the following statements is *false*?
- A) An inverse relationship has a negative slope value.
  - B) A direct relationship has a positive slope value.
  - C) A curved line has slope values that change at every point.
  - D) A straight line has a slope of zero.

Answer: D

Diff: 2 Page Ref: 27

Topic: Slope

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 6) The relationship between consumer spending and disposable personal income is
- A) an inverse relationship.
  - B) a direct relationship.
  - C) a negative relationship.
  - D) independent.

Answer: B

Diff: 1 Page Ref: 29

Topic: Positive and Negative Relationships

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 7) Suppose when the price of laptops fall, college students buy more laptops. This implies that
- A) there is a positive relationship between laptop prices and quantities purchased by college students.
  - B) there is a negative relationship between laptop prices and quantities purchased by college students.
  - C) there is a direct relationship between laptop prices and quantities purchased by college students.
  - D) there is a one-to-one relationship between laptop prices and quantities purchased by college students.

Answer: B

Diff: 1 Page Ref: 29

Topic: Positive and Negative Relationships

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) If the price of milk was \$2.50 a gallon and it is now \$3.25 a gallon, what is the percentage change in price?
- A) 13 percent
  - B) 30 percent
  - C) 75 percent
  - D) 77 percent

Answer: B

Diff: 2 Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) In 2010, Hooverville consumed 205,000 tons of sugar. In 2011, sugar consumption rose to 245,000 tons. Calculate the percentage change in sugar consumption.
- A) 8.37%
  - B) 11.95%
  - C) 19.51%
  - D) 26.33%

Answer: C

Diff: 2 Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) At a recent faculty meeting, Lorraine Waverly, president of Skywalker College, announced that enrollment is up by 12 percent over the previous semester. If enrollment the previous semester was 3,250 students, what is the student enrollment this semester?

A) 390                      B) 2,860                      C) 3,640                      D) 4,030

Answer: C

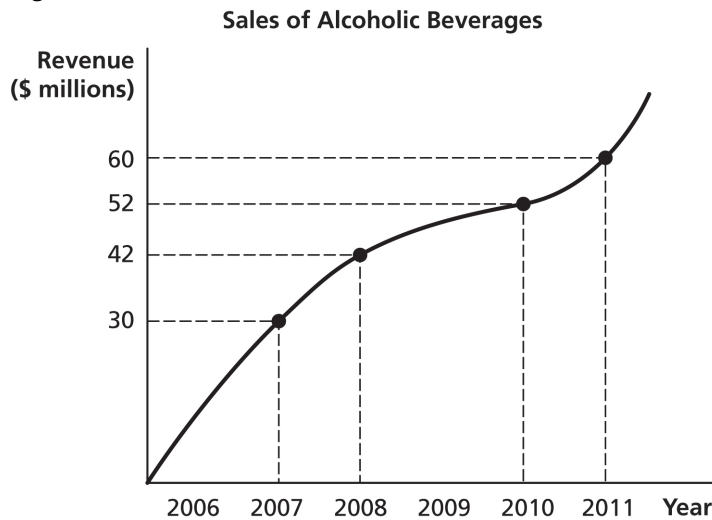
Diff: 2      Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

Figure 1-1



- 11) Refer to Figure 1-1. Using the information in the figure above, calculate the percentage change in sales of alcoholic beverages between 2008 and 2011.

A) 23.1%                      B) 23.8%                      C) 30%                      D) 42.9%

Answer: D

Diff: 1      Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 12) Refer to Figure 1-1. Using the information in the figure above, calculate the percentage change in sales of alcoholic beverages between 2007 and 2011.

A) 30%                      B) 50%                      C) 66.7%                      D) 100%

Answer: D

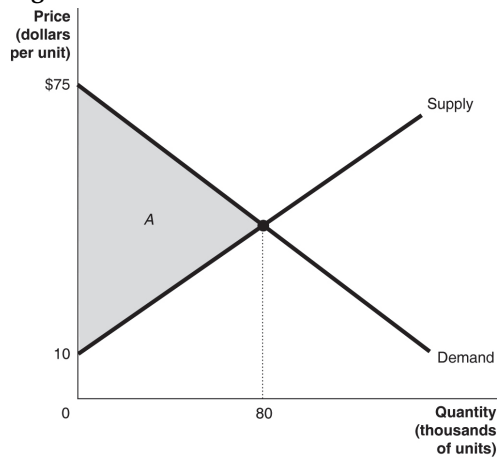
Diff: 1      Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking



**Figure 1-2**

13) Refer to Figure 1-2. Calculate the area of the triangle A.

A) \$1.3 million

B) \$2.6 million

C) \$3.4 million

D) \$5.2 million

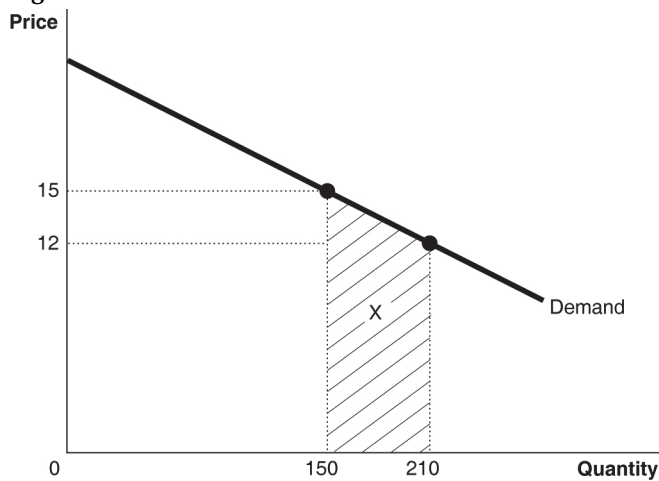
Answer: B

Diff: 1 Page Ref: 33

Topic: Formulas

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

**Figure 1-3**

14) Refer to Figure 1-3. Calculate the area of the trapezoid X.

A) \$270

B) \$720

C) \$810

D) \$2,520

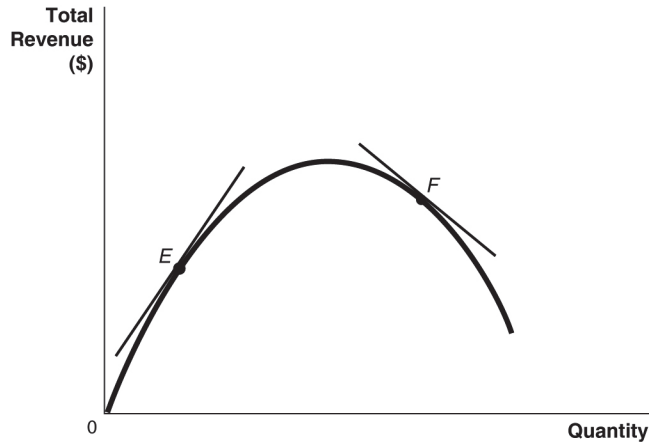
Answer: C

Diff: 2 Page Ref: 33

Topic: Formulas

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

**Figure 1-4**

15) Refer to Figure 1-4. Which of the following statements is *false*?

- A) The slope of the tangent at *E* is positive.
- B) The slope of the tangent at *F* is negative.
- C) The slope of the tangent at *E* and the slope of the tangent at *F* are equal.
- D) Neither the slope of the tangent at *E* nor the slope of the tangent at *F* are equal to zero.

Answer: C

Diff: 1 Page Ref: 31

Topic: Slope

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

16) What is the "omitted variable" problem in determining cause and effect?

- A) It is a problem that arises when an insignificant variable is given too much weight in an economic analysis leading to skewed conclusions about cause and effect.
- B) It is a problem that arises when a significant variable is not given enough weight in an economic experiment leading to skewed conclusions about cause and effect.
- C) It is a problem that arises when an insignificant economic variable that should have been omitted is included in an economic experiment leading to false conclusions about cause and effect.
- D) It is a problem that arises when an economic variable that affects other variables is omitted from an analysis and its omission leads to false conclusions about cause and effect.

Answer: D

Diff: 1 Page Ref: 30

Topic: Cause and Effect

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 17) \_\_\_\_\_ is a problem that occurs when one concludes that a change in variable X caused a change in variable Y when in actual fact, it is a change in variable Y that caused a change in variable X.
- A) The omitted variable  
B) The positive-to-negative relationship  
C) Reverse causality  
D) Nonlinear slope

Answer: C

Diff: 1 Page Ref: 30

Topic: Cause and Effect

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 18) The prevalence of Alzheimer's dementia is very high among residents living in nursing homes. A student concludes that it is likely that living in a nursing home causes Alzheimer's dementia. What is the flaw in the student's reasoning?
- A) The student has failed to take into account other causes of Alzheimer's disease.  
B) The student is drawing a false conclusion; he is confusing cause and effect.  
C) The student is using an inadequate sample size.  
D) The student is drawing a false conclusion by making the mistake of omitting critical variables such as the age and gender of the residents.

Answer: B

Diff: 2 Page Ref: 30

Topic: Cause and Effect

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 19) You explain to your roommate Surya, who makes beaded headbands, about an economic theory which asserts that consumers will purchase more of a product at lower prices than they will at higher prices. She contends that the theory is incorrect because over the past two years she has lowered the price of her headbands and yet has seen a decrease in sales. How would you respond to Surya?
- A) Surya is right; she has evidence to back her claim. The theory must be erroneous.  
B) Surya is making the mistake of assuming that correlation implies causation.  
C) I will explain to her that she is making the error of reverse causality: it is the decrease in demand that has caused her to lower her prices.  
D) I will explain to her that there are some omitted variables that have contributed to a decrease in her sales such as changes in income.

Answer: D

Diff: 2 Page Ref: 30

Topic: Cause and Effect

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 20) In 2013, Smileytown consumed 12,000 gallons of mouthwash. In 2014, mouthwash consumption rose to 17,000 gallons. Calculate the percentage change in mouthwash consumption.
- A) 17.2%  
B) 29.4%  
C) 41.7%  
D) 70.6%

Answer: C

Diff: 2 Page Ref: 32

Topic: Formulas

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 21) If a straight line passes through the point  $x = 24$  and  $y = 8$  and also through the point  $x = 8$  and  $y = 16$ , the slope of this line is
- A) negative 8 divided by 4.
- B) seven tenths.
- C) negative one half.
- D) one and one half.

Answer: C

Diff: 2      Page Ref: 27

*Topic: Slope*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

AACSB: Analytic thinking

- 22) If the price of gasoline was \$3.25 a gallon and it is now \$3.75 a gallon, what is the percentage change in price?
- A) 7.1 percent      B) 13.3 percent      C) 15.4 percent      D) 33.3 percent

Answer: C

Diff: 2      Page Ref: 32

Topic: Formulas

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

AACSB: Analytic thinking

- 23) At a recent company meeting, Ravi Batra, sales manager of Life's a Beach, a surfboard producer announced, "We have increased our sales by 13 percent in just 9 months." Suppose 9 months ago, its sales amounted to \$245,000, what is the value of its sales today?
- A) \$31,850                  B) \$207,638                  C) \$276,850                  D) \$359,905

Answer: C

Diff: 2      Page Ref: 32

*Topic: Formulas*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

AACSB: Analytic thinking

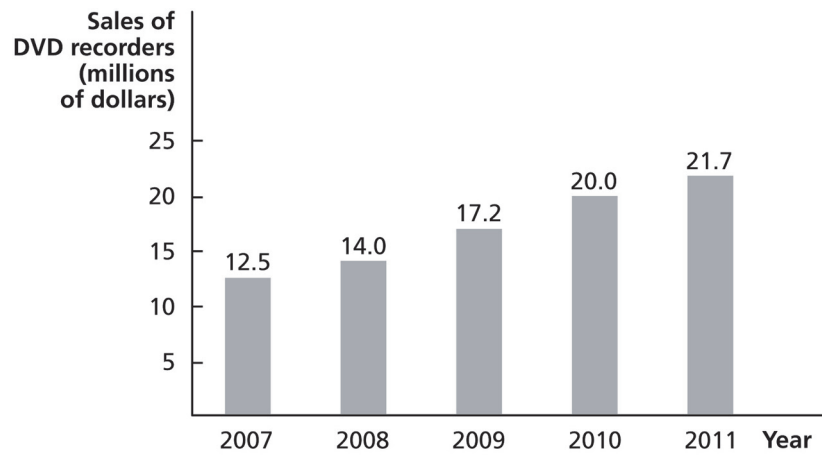
*Table 1-4*

Year	DVD Recorders (millions)
2007	12.5
2008	14.0
2009	17.2
2010	20.0
2011	21.7

- 24) **Refer to Table 1-4.** The table above shows the sales of DVD recorders in North America. Present the information using a bar graph.

Answer:

Answer:

*Diff: 1    Page Ref: 25**Topic: Graphs**Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.**AACSB: Analytic thinking*

# Chapter 2

## Trade-offs, Comparative Advantage, and the Market System

### 2.1 Production Possibilities Frontiers and Opportunity Costs

1) Scarcity

- A) stems from the incompatibility between limited resources and unlimited wants.
- B) can be overcome by discovering new resources.
- C) can be eliminated by rationing products.
- D) is a bigger problem in market economies than in socialist economies.

Answer: A

Diff: 2 Page Ref: 38

Topic: Scarcity

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

2) Tesla Motors manufactures its cars at a plant in Fremont, California. At this plant, Tesla is able to take advantage of the high level of technical training possessed by its American workers, but it also sacrifices the ability to pay lower wages had it chosen to open its plant in a low-wage country such as Mexico, India, or China. In deciding to open the Fremont plant, Tesla

- A) faced no trade-offs because employing more technically-skilled workers increased efficiency.
- B) faced a trade-off between higher cost and lower precision.
- C) adopted a negative technological change because it chose high-skilled workers over low-paid workers.
- D) eroded some of its competitiveness in the luxury electric car market because of its increased cost of production.

Answer: B

Diff: 2 Page Ref: 37

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

3) The principle of opportunity cost is that

- A) in a market economy, taking advantage of profitable opportunities involves some money cost.
- B) the economic cost of using a factor of production is the alternative use of that factor that is given up.
- C) taking advantage of investment opportunities involves costs.
- D) the cost of production varies depending on the opportunity for technological application.

Answer: B

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 4) The production possibilities frontier shows the \_\_\_\_\_ combinations of two products that may be produced in a particular time period with available resources.
- A) minimum attainable
  - B) maximum attainable
  - C) only
  - D) equitable

Answer: B

Diff: 2 Page Ref: 38

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 5) The production possibilities frontier model shows that
- A) if consumers decide to buy more of a product its price will increase.
  - B) a market economy is more efficient in producing goods and services than is a centrally planned economy.
  - C) economic growth can only be achieved by free market economies.
  - D) if all resources are fully and efficiently utilized, more of one good can be produced only by producing less of another good.

Answer: D

Diff: 2 Page Ref: 38

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 6) The production possibilities frontier model assumes which of the following?
- A) Labor, capital, land and natural resources are unlimited in quantity.
  - B) The economy produces only two products.
  - C) Any level of the two products that the economy produces is currently possible.
  - D) The level of technology is variable.

Answer: B

Diff: 2 Page Ref: 38

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 7) The attainable production points on a production possibility curve are
- A) the horizontal and vertical intercepts.
  - B) the points along the production possibilities frontier.
  - C) the points outside the area enclosed by the production possibilities frontier.
  - D) the points along and inside the production possibility frontier.

Answer: D

Diff: 2 Page Ref: 38

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

8) The points outside the production possibilities frontier are

- A) efficient.                      B) attainable.                      C) inefficient.                      D) unattainable.

Answer: D

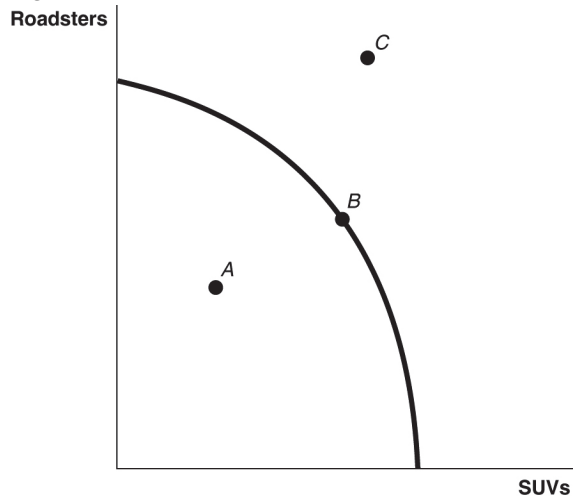
Diff: 2      Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Figure 2-1**



9) Refer to Figure 2-1. Point A is

- A) technically efficient.  
B) unattainable with current resources.  
C) inefficient in that not all resources are being used.  
D) the equilibrium output combination.

Answer: C

Diff: 1      Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

10) Refer to Figure 2-1. Point B is

- A) technically efficient.  
B) unattainable with current resources.  
C) inefficient in that not all resources are being used.  
D) the equilibrium output combination.

Answer: A

Diff: 1      Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking



11) Refer to Figure 2-1. Point C is

- A) technically efficient.
- B) unattainable with current resources.
- C) inefficient in that not all resources are being used.
- D) is the equilibrium output combination.

Answer: B

Diff: 1 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

12) In a production possibilities frontier model, a point \_\_\_\_\_ the frontier is productively inefficient.

- A) along
- B) inside
- C) outside
- D) at either intercept of

Answer: B

Diff: 1 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

13) Bella can produce either a combination of 60 silk roses and 80 silk leaves or a combination of 70 silk roses and 55 silk leaves. If she now produces 60 silk roses and 80 silk leaves, what is the opportunity cost of producing an additional 10 silk roses?

- A) 2.5 silk leaves
- B) 10 silk leaves
- C) 25 silk leaves
- D) 55 silk leaves

Answer: C

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

14) Pierre can produce either a combination of 20 bow ties and 30 neckties or a combination of 35 bow ties and 15 neckties. If he now produces 35 bow ties and 15 neckties, what is the opportunity cost of producing an additional 15 neckties?

- A) 2 bow ties
- B) 15 bow ties
- C) 20 bow ties
- D) 35 bow ties

Answer: B

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

15) If the production possibilities frontier is \_\_\_\_\_, then opportunity costs are constant as more of one good is produced.

- A) bowed out
- B) bowed in
- C) non-linear
- D) linear

Answer: D

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

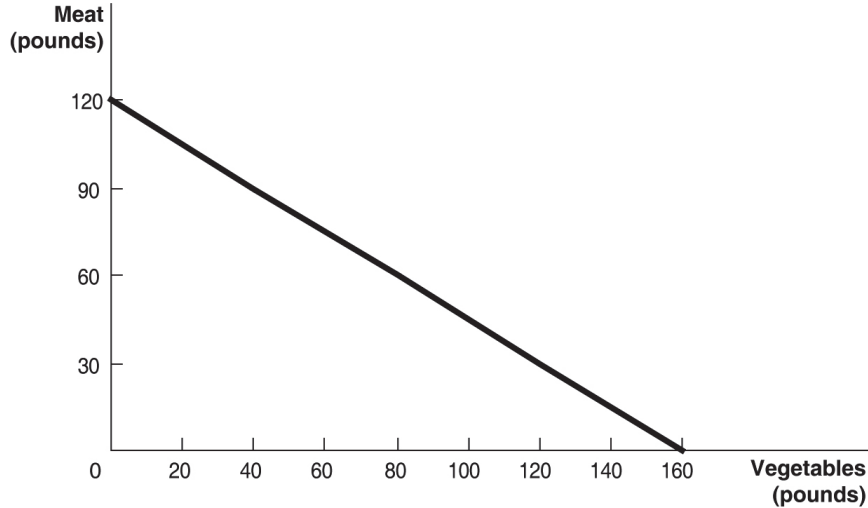
**Figure 2-2**

Figure 2-2 above shows the production possibilities frontier for Mendonca, an agrarian nation that produces two goods, meat and vegetables.

16) *Refer to Figure 2-2.* What is the opportunity cost of one pound of vegetables?

- A)  $\frac{3}{4}$  pound of meat  
 B) 1.2 pounds of meat  
 C)  $1\frac{1}{3}$  pounds of meat  
 D) 12 pounds of meat

Answer: A

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

17) *Refer to Figure 2-2.* What is the opportunity cost of one pound of meat?

- A)  $\frac{3}{4}$  pound of vegetables  
 B)  $1\frac{1}{3}$  pounds of vegetables  
 C) 1.6 pounds of vegetables  
 D) 16 pounds of vegetables

Answer: B

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 18) **Refer to Figure 2-2.** Suppose Mendonca is currently producing 60 pounds of vegetables per period. How much meat is it also producing, assuming that resources are fully utilized?

A) 45 pounds of meat  
 B) 75 pounds of meat  
 C) 80 pounds of meat  
 D) 100 pounds of meat

Answer: B

Diff: 2 Page Ref: 40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 19) **Refer to Figure 2-2.** If Mendonca chooses to produce 160 pounds of vegetables, how much meat can it produce to maximize production?

A) 0 pounds of meat  
 B) 30 pounds of meat  
 C) 60 pounds of meat  
 D) 120 pounds of meat

Answer: A

Diff: 2 Page Ref: 40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 20) **Refer to Figure 2-2.** If Mendonca chooses to produce 120 pounds of meat, how much vegetables can it produce to maximize production?

A) 0 pounds of vegetables  
 B) 60 pounds of vegetables  
 C) 100 pounds of vegetables  
 D) 160 pounds of vegetables

Answer: A

Diff: 2 Page Ref: 40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 21) **Refer to Figure 2-2.** The linear production possibilities frontier in the figure indicates that

A) Mendonca has a comparative advantage in the production of vegetables.  
 B) Mendonca has a comparative disadvantage in the production of meat.  
 C) the tradeoff between meat and vegetables is constant.  
 D) it is progressively more expensive to produce meat.

Answer: C

Diff: 2 Page Ref: 40-41

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 22) A production possibilities frontier with a bowed outward shape indicates
- A) the possibility of inefficient production.
  - B) constant opportunity costs as more and more of one good is produced.
  - C) increasing opportunity costs as more and more of one good is produced.
  - D) decreasing opportunity costs as more and more of one good is produced.

Answer: C

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 23) Increasing opportunity cost is represented by a \_\_\_\_\_ production possibilities frontier.
- A) linear
  - B) bowed in
  - C) bowed out
  - D) vertical

Answer: C

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 24) The slope of a production possibilities frontier
- A) has no economic relevance or meaning.
  - B) is always constant.
  - C) is always varying.
  - D) measures the opportunity cost of producing one more unit of a good.

Answer: D

Diff: 1 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 25) \_\_\_\_\_ marginal opportunity cost implies that the more resources already devoted to any activity, the payoff from allocating yet more resources to that activity increases by progressively smaller amounts.
- A) Increasing
  - B) Decreasing
  - C) Constant
  - D) Negative

Answer: A

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 26) If opportunity costs are constant, the production possibilities frontier would be graphed as
- A) a ray from the origin.
  - B) a positively sloped straight line.
  - C) a negatively sloped curve bowed in toward the origin.
  - D) a negatively sloped straight line.

Answer: D

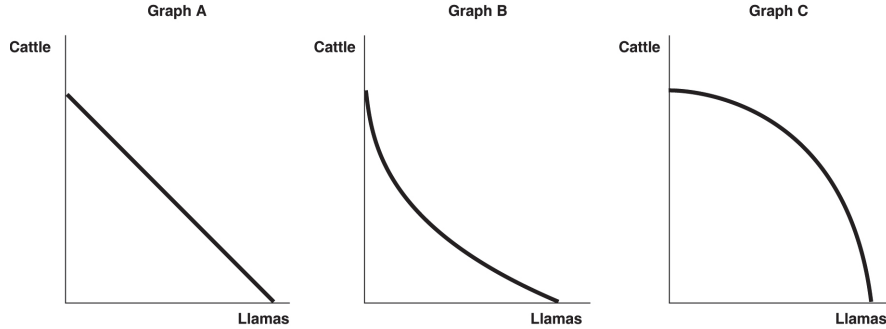
Diff: 1 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-3



27) Refer to Figure 2-3. Sergio Vignetto raises cattle and llamas on his land. His land is equally suitable for raising either animal. Which of the graphs in Figure 2-3 represent his production possibilities frontier?

- A) Graph A
- B) Graph B
- C) Graph C
- D) either Graph A or Graph C
- E) either Graph B or Graph C

Answer: A

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

28) Refer to Figure 2-3. Sergio Vignetto raises cattle and llamas on his land. A portion of his land is more suitable for raising cattle, and the other portion is better suited for raising llamas. Which of the graphs in Figure 2-3 represent his production possibilities frontier?

- A) Graph A
- B) Graph B
- C) Graph C
- D) either Graph A or Graph C
- E) either Graph B or Graph C

Answer: C

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

Table 2-1

Production choices for Tomaso's Trattoria

Choice	Quantity of Pizzas Produced	Quantity of Calzones Produced
A	48	0
B	36	15
C	24	30
D	12	45
E	0	60

- 29) *Refer to Table 2-1.* Assume Tomaso's Trattoria only produces pizzas and calzones. A combination of 24 pizzas and 30 calzones would appear
- A) along Tomaso's production possibilities frontier.
  - B) inside Tomaso's production possibilities frontier.
  - C) outside Tomaso's production possibilities frontier.
  - D) at the horizontal intercept of Tomaso's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 30) *Refer to Table 2-1.* Assume Tomaso's Trattoria only produces pizzas and calzones. A combination of 36 pizzas and 30 calzones would appear
- A) along Tomaso's production possibilities frontier.
  - B) inside Tomaso's production possibilities frontier.
  - C) outside Tomaso's production possibilities frontier.
  - D) at the horizontal intercept of Tomaso's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 31) *Refer to Table 2-1.* Assume Tomaso's Trattoria only produces pizzas and calzones. A combination of 24 pizzas and 15 calzones would appear
- A) along Tomaso's production possibilities frontier.
  - B) inside Tomaso's production possibilities frontier.
  - C) outside Tomaso's production possibilities frontier.
  - D) at the horizontal intercept of Tomaso's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 32) *Refer to Table 2-1.* Assume Tomaso's Trattoria only produces pizzas and calzones. Tomaso faces \_\_\_\_\_ opportunity costs in the production of pizzas and calzones.
- A) increasing
  - B) decreasing
  - C) constant
  - D) negative

Answer: C

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Table 2-2

## Production choices for Billie's Bedroom Shop

Choice	Quantity of Pillows Produced	Quantity of Blankets Produced
A	36	0
B	27	7
C	18	14
D	9	21
E	0	28

- 33) *Refer to Table 2-2.* Assume Billie's Bedroom Shop only produces pillows and blankets. A combination of 9 pillows and 21 blankets would appear
- A) along Billie's production possibilities frontier.
  - B) inside Billie's production possibilities frontier.
  - C) outside Billie's production possibilities frontier.
  - D) at the vertical intercept of Billie's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 34) *Refer to Table 2-2.* Assume Billie's Bedroom Shop only produces pillows and blankets. A combination of 9 pillows and 14 blankets would appear
- A) along Billie's production possibilities frontier.
  - B) inside Billie's production possibilities frontier.
  - C) outside Billie's production possibilities frontier.
  - D) at the vertical intercept of Billie's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 35) *Refer to Table 2-2.* Assume Billie's Bedroom Shop only produces pillows and blankets. A combination of 5 pillows and 21 blankets would appear
- A) along Billie's production possibilities frontier.
  - B) inside Billie's production possibilities frontier.
  - C) outside Billie's production possibilities frontier.
  - D) at the vertical intercept of Billie's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 36) Refer to Table 2–2. Assume Billie's Bedroom Shop only produces pillows and blankets. Billie faces \_\_\_\_\_ opportunity costs in the production of pillows and blankets.
- A) increasing                      B) constant                      C) decreasing                      D) negative

Answer: B

Diff: 2      Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 37) An inward shift of a nation's production possibilities frontier can occur due to
- A) a reduction in unemployment.  
 B) a natural disaster like a hurricane or bad earthquake.  
 C) a change in the amounts of one good desired.  
 D) an increase in the labor force.

Answer: B

Diff: 2      Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 38) An outward shift of a nation's production possibilities frontier represents
- A) economic growth.  
 B) rising prices of the two goods on the production possibilities frontier model.  
 C) an impossible situation.  
 D) a situation in which a country produces more of one good and less of another.

Answer: A

Diff: 1      Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 39) Economic decline (negative growth) is represented on a production possibilities frontier model by the production possibility frontier
- A) shifting outward.                      B) shifting inward.  
 C) becoming steeper.                      D) becoming flatter.

Answer: B

Diff: 1      Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 40) Without an increase in the supplies of factors of production, how can a nation achieve economic growth?
- A) by producing more high–value goods and less of low–value goods  
 B) through technological advancement which enables more output with the same quantity of resources  
 C) by lowering the prices of factors of production  
 D) by increasing the prices of factors of production

Answer: B



Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

41) Which of the following would shift a nation's production possibilities frontier outward?

- A) discovering a cheap way to convert sunshine into electricity
- B) an increase in demand for the nation's products
- C) a decrease in the unemployment rate
- D) a law requiring workers to retire at age 50

Answer: A

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-4

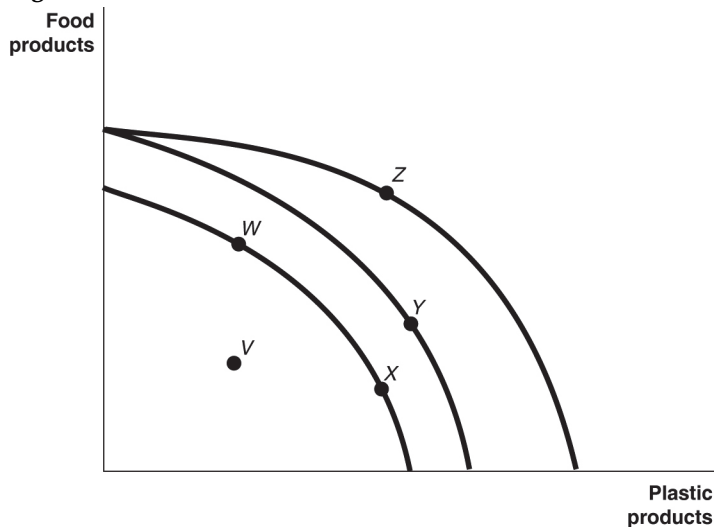


Figure 2-4 shows various points on three different production possibilities frontiers for a nation.

42) Refer to Figure 2-4. A movement from X to Y

- A) could be due to a change in consumers' tastes and preferences.
- B) could occur because of an influx of immigrant labor.
- C) is the result of advancements in food production technology only, with no change in the technology for plastic production.
- D) is the result of advancements in plastic production technology only, with no change in food production technology.

Answer: B

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 43) **Refer to Figure 2-4.** A movement from Y to Z
- A) represents an increase in the demand for plastic products.
  - B) could occur because of general technological advancements.
  - C) is the result of advancements in food production technology.
  - D) is the result of advancements in plastic production technology.

Answer: D

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 44) **Refer to Figure 2-4.** Consider the following events:
- a. an increase in the unemployment rate
  - b. a decrease in a nation's money supply
  - c. a war that kills a significant portion of a nation's population

Which of the events listed above could cause a movement from Y to W?

- A) a, b and c
- B) a and b only
- C) a and c only
- D) a only
- E) c only

Answer: E

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 45) **Refer to Figure 2-4.** Consider the following movements:
- a. from point V to point W
  - b. from point W to point Y
  - c. from point Y to point Z

Which of the movements listed above represents economic growth?

- A) a, b, and c
- B) b and c only
- C) a only
- D) b only

Answer: B

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 46) **Refer to Figure 2-4.** Consider the following events:
- a. a decrease in the unemployment rate
  - b. general technological advancement
  - c. an increase in consumer wealth

Which of the events listed above could cause a movement from V to W?

- A) a only
- B) a and b only
- C) b and c only
- D) a, b, and c

Answer: A

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

47) **Refer to Figure 2-4.** Consider the following events:

- a. a reduction in the patent protection period to no more than 2 years
- b. a war that destroys a substantial portion of a nation's capital stock
- c. the lack of secure and enforceable property rights system

Which of the events listed above could cause a movement from W to V?

- A) a only
- B) a and b only
- C) a and c only
- D) b and c only
- E) a, b, and c

Answer: C

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

48) **Refer to Figure 2-4.** A movement from \_\_\_\_\_ could occur because of an influx of immigrant labor.

- A) W to V
- B) X to W
- C) W to Z
- D) Y to W

Answer: C

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

49) **Refer to Figure 2-4.** A movement from \_\_\_\_\_ is the result of negative technological change in plastic production.

- A) V to X
- B) X to W
- C) W to Z
- D) Z to Y

Answer: D

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

50) **Refer to Figure 2-4.** Consider the following events:

- a. a decrease in the unemployment rate
- b. an increase in a nation's money supply
- c. an influx of immigrant workers

Which of the events listed above could cause a movement from X to Z?

- A) a, b and c
- B) a and b only
- C) a and c only
- D) a only
- E) c only

Answer: E

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

51) **Refer to Figure 2-4.** Consider the following movements:

- a. from point V to point W
- b. from point W to point Y
- c. from point Y to point Z

Which of the movements listed above represents advancements in technology with respect to only plastic production?

- A) a, b, and c                      B) b and c only                      C) b only                      D) c only

Answer: D

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

52) **Refer to Figure 2-4.** Consider the following events:

- a. an increase in the unemployment rate
- b. general technological advancement
- c. a decrease in consumer wealth

Which of the events listed above could cause a movement from X to V?

- A) a only                      B) a and b only                      C) b and c only                      D) a, b, and c

Answer: A

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

53) **Refer to Figure 2-4.** Consider the following events:

- a. an increase in the patent protection period to 30 years
- b. an increase of a nation's capital stock
- c. an improved property rights system

Which of the events listed above could cause a movement from V to W?

- A) a only  
B) a and b only  
C) a and c only  
D) b and c only  
E) a, b, and c

Answer: C

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 54) The Great Depression of the 1930s with a large number of workers and factories unemployed would be represented in a production possibilities frontier graph by

A) a point inside the frontier.  
 B) a point outside the frontier.  
 C) a point on the frontier.  
 D) an intercept on either the vertical or the horizontal axis.

Answer: A

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 55) Suppose there is no unemployment in the economy and society decides that it wants more of one good. Which of the following statements is *true*?

A) It can only achieve this with an advance in technology.  
 B) It can increase output without giving up another good.  
 C) It can only achieve this with an increase in resource supplies.  
 D) It will have to give up production and consumption of some other good.

Answer: D

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 56) If society decides it wants more of one good and all resources are fully utilized, then

A) it is unable to do this unless technology advances.  
 B) additional resource supplies will have to be found.  
 C) it has to give up some of another good and incur some opportunity costs.  
 D) more unemployment will occur.

Answer: C

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 57) According to the production possibility model, if more resources are allocated to the production of physical and human capital, then which of the following is likely to happen?

A) Fewer goods will be produced for consumption today.  
 B) The production possibilities frontier will be shift inward in the future.  
 C) Future economic growth will decline.  
 D) The country's total production will fall.

Answer: A

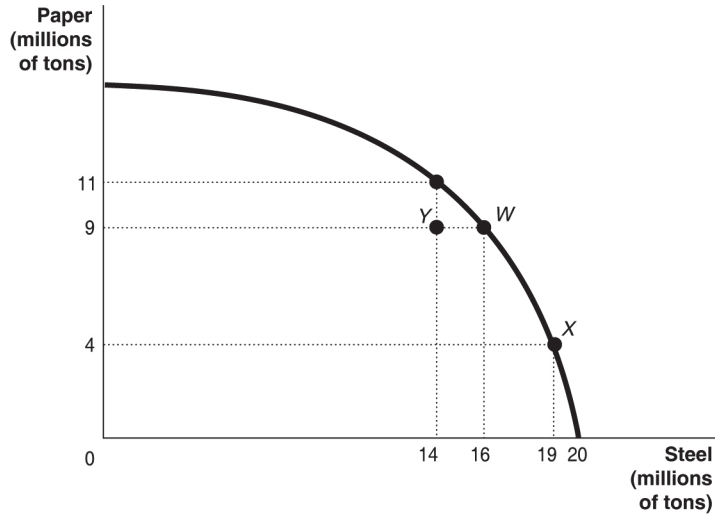
Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-5



58) Refer to Figure 2-5. If the economy is currently producing at point Y, what is the opportunity cost of moving to point W?

- A) 2 million tons of steel  
B) zero  
C) 9 million tons of paper  
D) 16 million tons of paper

Answer: B

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

59) Refer to Figure 2-5. If the economy is currently producing at point W, what is the opportunity cost of moving to point X?

- A) 3 million tons of steel  
B) 19 million tons of steel  
C) 5 million tons of paper  
D) 9 million tons of paper

Answer: C

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

60) Refer to Figure 2-5. If the economy is currently producing at point X, what is the opportunity cost of moving to point Y?

- A) 5 million tons of steel  
B) 9 million tons of paper  
C) 5 million tons of paper  
D) 14 million tons of steel

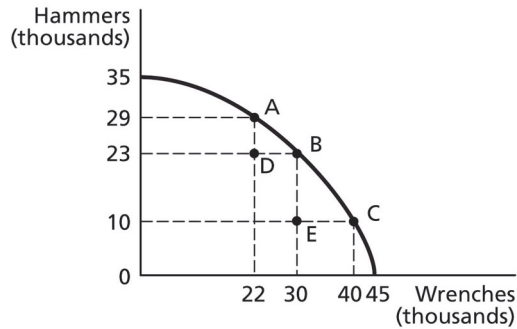
Answer: A

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

**Figure 2-6**

- 61) **Refer to Figure 2-6.** If the economy is currently producing at point *A*, what is the opportunity cost of moving to point *B*?
- A) 8 thousand wrenches  
B) 6 thousand hammers  
C) 30 thousand wrenches  
D) 23 thousand hammers

Answer: B

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 62) **Refer to Figure 2-6.** If the economy is currently producing at point *C*, what is the opportunity cost of moving to point *B*?
- A) 10 thousand wrenches  
B) 13 thousand hammers  
C) 30 thousand wrenches  
D) 23 thousand hammers

Answer: A

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 63) **Refer to Figure 2-6.** If the economy is currently producing at point *D*, what is the opportunity cost of moving to point *B*?
- A) 8 thousand wrenches  
B) 23 thousand hammers  
C) 30 thousand wrenches  
D) 0 hammers

Answer: D

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 64) *Refer to Figure 2–6.* If the economy is currently producing at point *E*, what is the opportunity cost of moving to point *B*?
- |                         |                        |
|-------------------------|------------------------|
| A) 13 thousand hammers  | B) 10 thousand hammers |
| C) 30 thousand wrenches | D) 0 wrenches          |

Answer: D

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 65) *Refer to Figure 2–6.* If the economy is currently producing at point *E*, what is the opportunity cost of moving to point *D*?
- |                        |                        |
|------------------------|------------------------|
| A) 13 thousand hammers | B) 10 thousand hammers |
| C) 8 thousand wrenches | D) 0 wrenches          |

Answer: C

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 66) In a report made to the U.S. Congress in 2001, the National Academy of Sciences cautioned that if fuel economy encourages the production of smaller and lighter cars, "Some additional traffic fatalities would be expected." This statement suggests that
- U.S. auto manufacturers are more concerned about producing fuel efficient cars to compete with their Japanese and South Korean rivals than about consumer safety.
  - there is a tradeoff between safety and fuel economy.
  - society should value safety more highly than fuel economy.
  - society should value fuel economy more highly than consumer safety because of the long term environment benefits generated by less gasoline use.

Answer: B

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 67) Suppose your expenses for this term are as follows: tuition: \$12,000, room and board: \$6,500, books and other educational supplies: \$1,500. Further, during the term, you can only work part-time and earn \$3,500 instead of your full-time salary of \$14,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?
- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| A) \$13,500 | B) \$20,000 | C) \$24,000 | D) \$30,500 |
|-------------|-------------|-------------|-------------|

Answer: C

Diff: 3 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking



- 68) Suppose your expenses for this term are as follows: tuition: \$28,000, room and board: \$9,000, books and other educational supplies: \$2,500. Further, during the term, you can only work part-time and earn \$16,000 instead of your full-time salary of \$42,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?

A) \$36,500                      B) \$56,500                      C) \$65,500                      D) \$72,500

Answer: B

Diff: 3      Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 69) The opportunity cost of taking a semester-long economics class is

A) the cost of tuition and fees only.  
 B) the value of the time spent in the classroom.  
 C) zero because there is no admission charged if you are enrolled in the course.  
 D) equal to the highest value of an alternative use of the time and money spent on the class.  
 E) the knowledge and enjoyment you receive from attending the class.

Answer: D

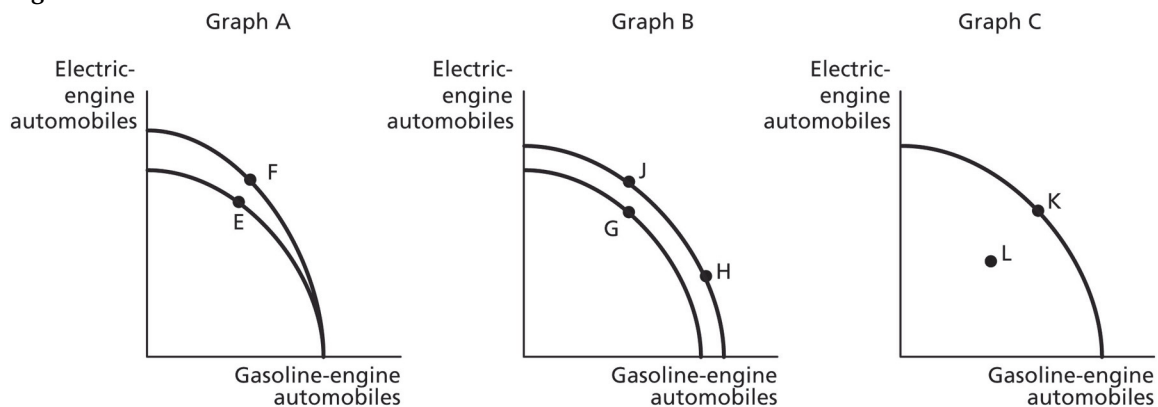
Diff: 2      Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

Figure 2-7



Mercedes Benz recently decided to introduce its B-class automobile in the U.S. market, an electric car that is has designed and developed in a partnership with Tesla Motors. Assume Mercedes Benz chooses to produce both electric-engine vehicles and gasoline-engine vehicles. Figure 2-7 shows changes to its production possibilities frontier in response to new developments and different strategic production decisions.

- 70) Refer to Figure 2-7. Assume a technological advancement greatly reduces the cost to produce electric-engine vehicles. This is best represented by the

A) movement from E to F in Graph A.                      B) movement from G to H in Graph B.  
 C) movement from K to L in Graph C.                      D) movement from H to J in Graph B.

Answer: A

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 71) **Refer to Figure 2-7.** Assume that in response to changing consumer demands, Mercedes cuts back on the production of electric vehicles and increased its production of gasoline-powered vehicles. This strategy is best represented by the
- A) movement from F to E in Graph A.                      B) movement from G to J in Graph B.  
C) movement from L to K in Graph C.                      D) movement from J to H in Graph B.

Answer: D

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 72) **Refer to Figure 2-7.** Assume that in 2014, Mercedes reopened one of its factories after an extensive remodelling which now allows for the production of both types of vehicles. This is best represented by the
- A) movement from E to F in Graph A.                      B) movement from H to J in Graph B.  
C) movement from L to K in Graph C.                      D) movement from J to G in Graph B.

Answer: C

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 73) Sarita can bake either a combination of 25 cakes and 15 pies or a combination of 10 cakes and 20 pies. If she now bakes 10 cakes and 20 pies, what is the opportunity cost of baking an additional 15 cakes?
- A) 5 pies                      B) 10 pies                      C) 15 pies                      D) 20 pies

Answer: A

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Figure 2-8**

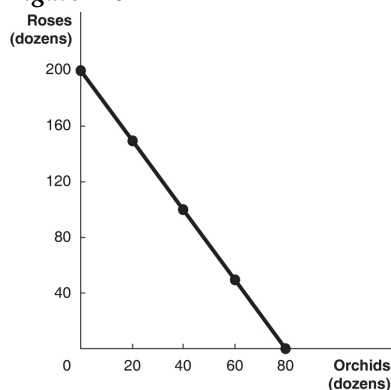


Figure 2-8 above shows the production possibilities frontier for Vidalia, a nation that produces two goods,

roses and orchids.

74) *Refer to Figure 2–8.* What is the opportunity cost of 80 dozen orchids?

- A) 0 roses  
B) 2.5 dozen roses  
C) 40 dozen roses  
D) 200 dozen roses

Answer: D

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

75) *Refer to Figure 2–8.* What is the opportunity cost of 100 dozen roses?

- A) 0.8 dozen orchids  
B) 5 dozen orchids  
C) 40 dozen orchids  
D) 80 dozen orchids

Answer: C

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

76) *Refer to Figure 2–8.* Suppose Vidalia is currently producing 60 dozen orchids per period. How many roses is it also producing, assuming that resources are fully utilized?

- A) 40 dozen roses  
B) 50 dozen roses  
C) 60 dozen roses  
D) 100 dozen roses

Answer: B

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

77) *Refer to Figure 2–8.* Suppose Vidalia is currently producing 120 dozen roses per period. How many orchids is it also producing, assuming that resources are fully utilized?

- A) 20 dozen orchids  
B) 32 dozen orchids  
C) 44 dozen orchids  
D) 68 dozen orchids

Answer: B

Diff: 2 Page Ref: 40–41

Topic: Opportunity Cost

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

**Table 2–3**

**Production Choices for Dina's Diner**

Choice	Quantity of Sliders Produced	Quantity of Hot Wings Produced
A	160	0
B	120	50
C	80	100
D	40	150
E	0	200

- 78) **Refer to Table 2–3.** Assume Dina's Diner only produces sliders and hot wings. A combination of 80 sliders and 100 hot wings would appear
- A) along Dina's production possibilities frontier.
  - B) inside Dina's production possibilities frontier.
  - C) outside Dina's production possibilities frontier.
  - D) at the vertical intercept of Dina's production possibilities frontier.

Answer: A

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 79) **Refer to Table 2–3.** Assume Dina's Diner only produces sliders and hot wings. A combination of 80 sliders and 50 hot wings would appear
- A) along Dina's production possibilities frontier.
  - B) inside Dina's production possibilities frontier.
  - C) outside Dina's production possibilities frontier.
  - D) at the vertical intercept of Dina's production possibilities frontier.

Answer: B

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 80) **Refer to Table 2–3.** Assume Dina's Diner only produces sliders and hot wings. A combination of 120 sliders and 100 hot wings would appear
- A) along Dina's production possibilities frontier.
  - B) inside Dina's production possibilities frontier.
  - C) outside Dina's production possibilities frontier.
  - D) at the vertical intercept of Dina's production possibilities frontier.

Answer: C

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 81) **Refer to Table 2–3.** Dina faces \_\_\_\_\_ opportunity costs in the production of sliders and hot wings.
- A) increasing
  - B) decreasing
  - C) constant
  - D) negative

Answer: C

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 82) Suppose your expenses for this term are as follows: tuition: \$10,000, room and board: \$6,000, books and other educational supplies: \$1,000. Further, during the term, you can only work part-time and earn \$8,000 instead of your full-time salary of \$20,000. What is the opportunity cost of going to college this term, assuming that your room and board expenses would be the same even if you did not go to college?
- A) \$11,000
  - B) \$17,000
  - C) \$23,000
  - D) \$29,000

Answer: C

Diff: 3 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 83) The opportunity cost of going to an outdoor music festival is
- A) the enjoyment you receive from going to the festival.
  - B) the value of the time spent at the festival.
  - C) equal to the highest value of an alternative use of the time and money spent on the festival.
  - D) zero because there is no overhead costs for an outdoor festival.
  - E) the cost of the festival ticket only.

Answer: C

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 84) A decrease in the unemployment rate may be represented as a movement from a point on the production possibilities frontier to a point outside the frontier.

Answer: FALSE

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 85) If a country is producing efficiently and is on the production possibilities frontier, the only way to produce more of one good is to produce less of the other.

Answer: TRUE

Diff: 1 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 86) Consider a country that produces only two goods: kayaks and coconuts. Suppose it is possible for this country to increase its production of kayaks without producing fewer coconuts. In this case, its current output combination is efficient.

Answer: FALSE

Diff: 2 Page Ref: 38

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 87) Any output combination outside a production possibility frontier is associated with unused or underutilized resources.

Answer: FALSE

Diff: 1 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 88) An increase in the labor force shifts the production possibility frontier inwards over time.

Answer: FALSE

Diff: 1 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 89) If additional units of a good could be produced at a constant opportunity cost, the production possibility frontier would be bowed outward (concave).

Answer: FALSE

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 90) On a diagram of a production possibility frontier, opportunity cost is represented by the production possibility frontier shifting outward.

Answer: FALSE

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 91) To increase gas mileage, automobile manufacturers make cars small and light. Large cars absorb more of the impact of an accident than small cars but yield lower gas mileage. These facts suggest that a negative relationship exists between safety and gas mileage.

Answer: TRUE

Diff: 2 Page Ref: 42

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 92) An increase in the unemployment rate may be represented as a movement from a point on the production possibilities frontier to a different point on the frontier.

Answer: FALSE

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 93) If a country is producing efficiently and is on the production possibilities frontier, the country can produce more of one good without producing less of the other good.

Answer: FALSE

Diff: 1 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 94) Consider a country that produces only two goods: parrots and iguanas. Suppose it is impossible for this country to increase its production of parrots without producing fewer iguanas. In this case, its current output combination is efficient.

Answer: TRUE

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 95) Any output combination along a production possibility frontier is associated with fully utilized resources.

Answer: TRUE

Diff: 1 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 96) A decrease in population shifts the production possibility frontier outwards over time.

Answer: FALSE

Diff: 1 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 97) If additional units of a good could be produced at an increasing opportunity cost, the production possibility frontier would be linear.

Answer: FALSE

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 98) On a diagram of a production possibility frontier, economic growth is represented by the slope of the production possibility frontier.

Answer: FALSE

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

99) What is meant by the term opportunity cost?

Answer: Opportunity cost is the highest-valued alternative that must be given up to engage in an activity.

Diff: 2 Page Ref: 39

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

100) What is economic growth?

Answer: Economic growth refers to the ability of the economy to increase the production of goods and services.

Diff: 2 Page Ref: 43

Topic: Economic Growth

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

101) What is a production possibilities frontier? What do points along the frontier represent? What do points inside and outside the frontier represent?

Answer: A production possibilities frontier is a curve showing the maximum attainable combinations of two products that may be produced with available resources and current technology. Points along a production possibilities frontier are attainable with the resources available and are efficient. Points inside the frontier are attainable but inefficient. Points outside the frontier are unattainable.

Diff: 2 Page Ref: 38–39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

102) What shape does a production possibilities frontier take if it displays increasing opportunity costs? What shape does a production possibilities frontier take if it displays constant opportunity costs? Which shape is most common in production situations?

Answer: A production possibilities frontier which displays increasing opportunity costs is bowed out. A production possibilities frontier which displays constant opportunity costs is linear. A bowed out production possibilities frontier is most common in production situations.

Diff: 2 Page Ref: 42

Topic: Opportunity Cost

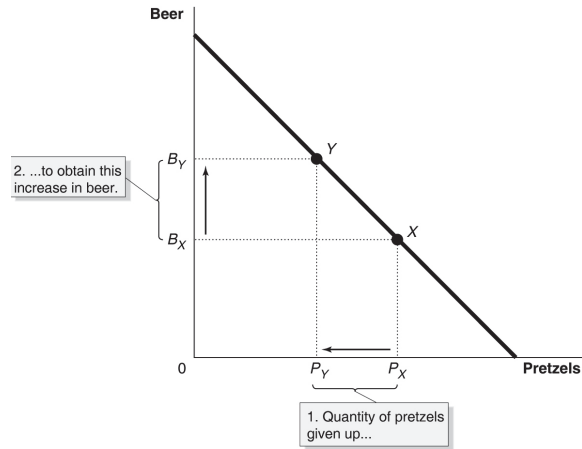
Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



- 103) a. Draw a production possibilities frontier for a country that produces two goods, beer and pretzels. Assume that resources are equally suited to both tasks.  
 b. Define opportunity costs.  
 c. Use your production possibilities frontier graph to demonstrate the principle of opportunity costs.

Answer: a. The PPF is linear to reflect the fact that resources are equally suited to both tasks.



- b. Opportunity cost is defined as the highest valued alternative that must be forgone by taking an action.  
 c. In the PPF graph in part (a), suppose the country is currently producing at point X and wishes to move to point Y so that it can produce more beer. The only way it can obtain more beer is to give up some amount of pretzels.

Diff: 2 Page Ref: 39

Topic: Production Possibilities Frontiers

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

Table 2-4

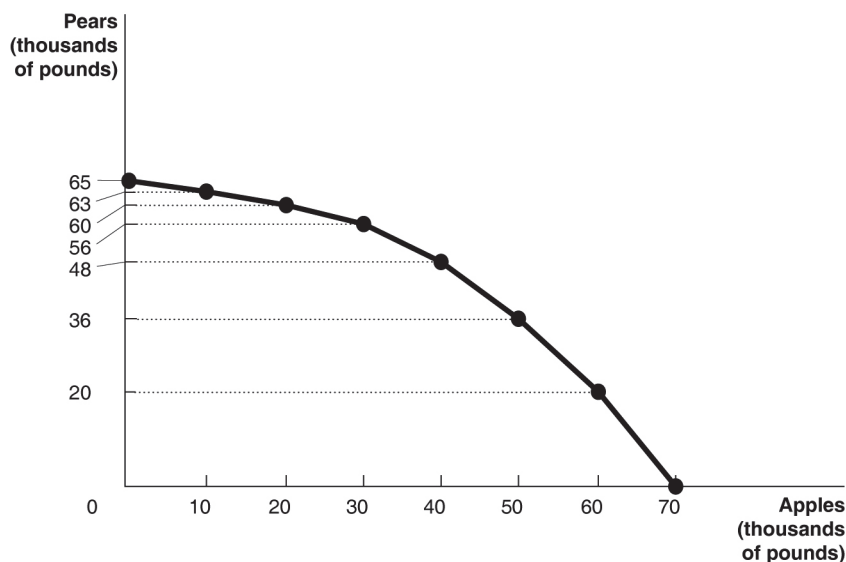
Possible Output Combinations	Apples (thousands of pounds)	Pears (thousands of pounds)
A	70	0
B	60	20
C	50	36
D	40	48
E	30	56
F	20	60
G	10	63
H	0	65

- 104) **Refer to Table 2-4.** The Fruit Farm produces only apples and pears. The table above shows the maximum possible output combinations of the two fruits using all resources and currently available technology.

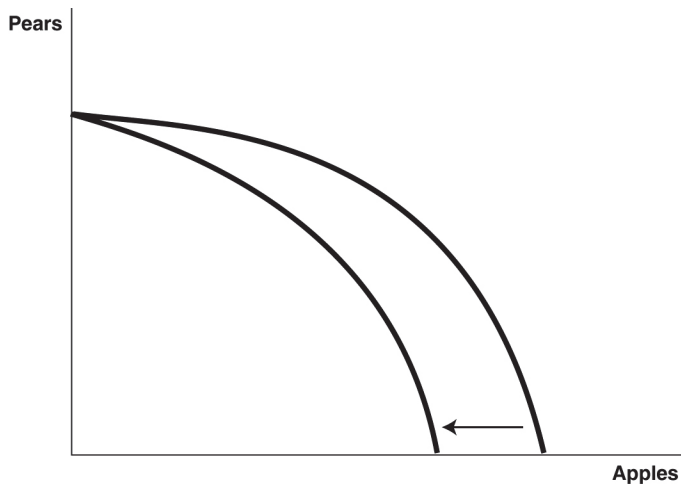
- a. Graph The Fruit Farm's production possibilities frontier. Put apples on the horizontal axis and pears on the vertical axis. Be sure to identify the output combination points on your diagram.

- b. Suppose The Fruit Farm is currently producing at point *D*. What is the opportunity cost of producing an additional 8,000 pounds of pears?
- c. Suppose The Fruit Farm is currently producing at point *D*. What happens to the opportunity cost of producing more and more pears? Does it increase, decrease or remain constant? Explain your answer.
- d. Suppose The Fruit Farm is currently producing at point *G*. What happens to the opportunity cost of producing more and more apples? Does it increase, decrease or remain constant? Explain your answer.
- e. Suppose The Fruit Farm is plagued by the apple maggot infestation which destroys apple trees but not pears. Show in a graph what happens to its PPF.

Answer: a.



- b. 10,000 pounds of apples
- c. It increases. For example to move to *E*, The Fruit Farm has to give up 10,000 pounds of apples to produce an additional 8,000 pounds of pears. For each additional 10,000 pounds of apples foregone, the payoff in terms of pears gets progressively smaller.
- d. It increases. Each time it wants to produce an additional 10,000 pounds of apples, more and more pears must be given up.
- e.



Diff: 3 Page Ref: 40–41

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Table 2–5

Possible Output Combinations	Shrimp (thousands of pounds)	Oysters (thousands of pounds)
A	35	0
B	30	20
C	25	35
D	20	47
E	15	57
F	10	64
G	5	68
H	0	70

105) *Refer to Table 2–5.* The Shellfish Shack produces only shrimp and oysters. The table above shows the maximum possible output combinations of the two types of shellfish using all resources and currently available technology.

- Suppose The Shellfish Shack is currently producing at point *E*. What is the opportunity cost of producing an additional 11,000 pounds of oysters?
- Suppose The Shellfish Shack is currently producing at point *E*. What happens to the opportunity cost of producing more and more shrimp? Does it increase, decrease or remain constant? Explain your answer.
- Suppose The Shellfish Shack is currently producing at point *B*. What happens to the opportunity cost of producing more and more oysters? Does it increase, decrease or remain constant? Explain your answer.
- Suppose The Shellfish Shack is plagued by a disease which destroys oyster beds but not shrimp habitats. What would happen to its PPF?

Answer: a. 10,000 pounds of shrimp

b. It increases. For example to move to *D*, The Shellfish Shack has to give up 10,000 pounds of oysters to produce an additional 5,000 pounds of shrimp. For each additional 5,000 pounds of shrimp produced, more and more oysters must be given up.

c. It increases. Each time it gives up 5,000 pounds of shrimp, fewer and fewer oysters can be produced.

d. Its PPF would rotate inward, with maximum shrimp production staying the same but maximum oyster production being reduced.

Diff: 3 Page Ref: 40–41

Topic: Production Possibilities Frontiers

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

## 2.2 Comparative Advantage and Trade

- 1) You have an absolute advantage whenever you
- A) are better educated than someone else.
  - B) can produce more of something than others with the same resources.
  - C) prefer to do one particular activity.
  - D) can produce something at a lower opportunity cost than others.

Answer: B

Diff: 1 Page Ref: 45

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 2-6**

	Serena	Haley
Bracelets	8	9
Necklaces	16	12

Table 2-6 shows the output per week of two jewelers, Serena and Haley. They can either devote their time to making bracelets or making necklaces.

- 2) Refer to Table 2-6. Which of the following statements is true?
- A) Haley has an absolute advantage in making both products.
  - B) Serena has an absolute advantage in making both products.
  - C) Haley has an absolute advantage in making bracelets and Serena in making necklaces.
  - D) Haley has an absolute advantage in making necklaces and Serena in making bracelets.

Answer: C

Diff: 1 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 3) Refer to Table 2-6. What is Haley's opportunity cost of making a bracelet?
- A) 3/4 of a bracelet
  - B) 3 bracelets
  - C) 1 1/3 necklaces
  - D) 2 necklaces

Answer: C

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

4) **Refer to Table 2-6.** What is Haley's opportunity cost of making a necklace?

- A)  $\frac{3}{4}$  of a bracelet  
B) 3 bracelets  
C)  $1\frac{1}{3}$  necklaces  
D) 2 necklaces

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

5) **Refer to Table 2-6.** What is Serena's opportunity cost of making a bracelet?

- A) 2 necklaces  
B)  $\frac{1}{2}$  of a bracelet  
C)  $\frac{1}{2}$  of a necklace  
D)  $\frac{3}{4}$  of a bracelet

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

6) **Refer to Table 2-6.** What is Serena's opportunity cost of making a necklace?

- A) 2 necklaces  
B)  $\frac{1}{2}$  of a bracelet  
C)  $\frac{1}{2}$  of a necklace  
D)  $\frac{3}{4}$  of a bracelet

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

7) **Refer to Table 2-6.** Which of the following statements is *true*?

- A) Haley has a comparative advantage in making both products.  
B) Serena has a comparative advantage in making both products.  
C) Haley has a comparative advantage in making bracelets and Serena in making necklaces.  
D) Haley has a comparative advantage in making necklaces and Serena in making bracelets.

Answer: C

Diff: 3 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 2-7**

	Fred	Barney
Pogo Sticks	24	28
Unicycles	8	14

Table 2-7 shows the output per month of two people, Fred and Barney. They can either devote their time to making pogo sticks or making unicycles.

8) **Refer to Table 2-7.** Which of the following statements is *true*?

- A) Fred has an absolute advantage in making both products.

- B) Barney has an absolute advantage in making both products.
- C) Barney has an absolute advantage in making pogo sticks and Fred in making unicycles.
- D) Barney has an absolute advantage in making unicycles and Fred in making pogo sticks.

Answer: B

Diff: 1 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

9) Refer to Table 2-7. What is Fred's opportunity cost of making a pogo stick?

- A) 1/3 unicycle
- B) 3 unicycles
- C) 6/7 pogo stick
- D) 1/2 unicycle

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

10) Refer to Table 2-7. What is Fred's opportunity cost of making a unicycle?

- A) 1/3 pogo stick
- B) 3 pogo sticks
- C) 1/2 unicycle
- D) 1.3 pogo sticks

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

11) Refer to Table 2-7. What is Barney's opportunity cost of making a pogo stick?

- A) 1/2 unicycle
- B) 2 unicycles
- C) 1/3 unicycle
- D) 1.4 pogo sticks

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

12) Refer to Table 2-7. What is Barney's opportunity cost of making a unicycle?

- A) 1/2 pogo stick
- B) 2 pogo sticks
- C) 1.75 unicycles
- D) 2.8 pogo sticks

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

13) Refer to Table 2-7. Which of the following statements is true?

- A) Fred has a comparative advantage in making both products.
- B) Barney has a comparative advantage in making both products.
- C) Barney has a comparative advantage in making pogo sticks and Fred in making unicycles.
- D) Barney has a comparative advantage in making unicycles and Fred in making pogo sticks.

Answer: D

Diff: 3 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 14) Comparative advantage means the ability to produce a good or service
- A) at a lower selling price than any other producer.
  - B) at a lower opportunity cost than any other producer.
  - C) of a higher quality than any other producer.
  - D) at a higher profit level than any other producer.

Answer: B

Diff: 1 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 15) Specializing in the production of a good or service in which one has a comparative advantage enables a country to do all of the following *except*
- A) engage in mutually beneficial trade with other nations.
  - B) increase the variety of products that it can consume with no increase in resources.
  - C) consume a combination of goods that lies outside its own production possibilities frontier.
  - D) produce a combination of goods that lies outside its own production possibilities frontier.

Answer: D

Diff: 3 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 16) For each bottle of wine that Italy produces, it gives up the opportunity to make 10 pounds of cheese. France can produce 1 bottle of wine for every 25 pounds of cheese it produces. Which of the following is true about the comparative advantage between the two countries?
- A) Italy has the comparative advantage in cheese.
  - B) Italy has the comparative advantage in wine.
  - C) France has the comparative advantage in wine and cheese.
  - D) France has the comparative advantage in wine.

Answer: B

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-9

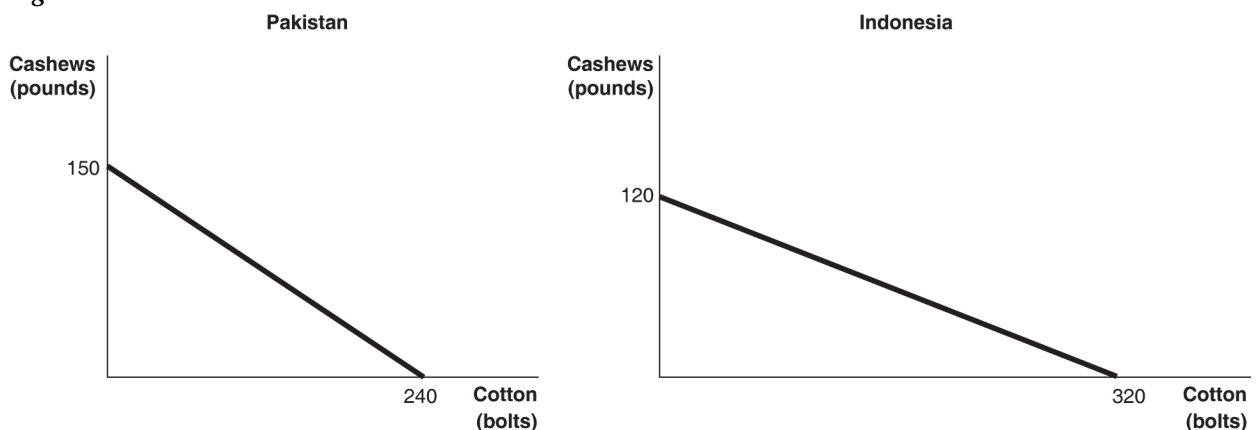


Figure 2-9 shows the production possibilities frontiers for Pakistan and Indonesia. Each country produces two goods, cotton and cashews.

17) **Refer to Figure 2-9.** What is the opportunity cost of producing 1 bolt of cotton in Pakistan?

- A) 3/8 of a pound of cashews
- B) 5/8 of a pound of cashews
- C) 1 3/5 pounds of cashews
- D) 150 pounds of cashews

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

18) **Refer to Figure 2-9.** What is the opportunity cost of producing 1 bolt of cotton in Indonesia?

- A) 3/8 of a pound of cashews
- B) 5/8 of a pound of cashews
- C) 2 2/3 pounds of cashews
- D) 120 pounds of cashews

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

19) **Refer to Figure 2-9.** What is the opportunity cost of producing 1 pound of cashews in Pakistan?

- A) 3/8 of a bolt of cotton
- B) 5/8 of a bolt of cotton
- C) 1 3/5 bolts of cotton
- D) 240 bolts of cotton

Answer: C

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

20) **Refer to Figure 2-9.** What is the opportunity cost of producing 1 pound of cashews in Indonesia?

- A) 3/8 of a bolt of cotton
- B) 5/8 of a bolt of cotton
- C) 2 2/3 bolts of cotton
- D) 320 bolts of cotton

Answer: C

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

21) **Refer to Figure 2-9.** Which country has a comparative advantage in the production of cotton?

- A) Indonesia
- B) They have equal productive abilities.
- C) Pakistan
- D) neither country

Answer: A

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



- 22) Refer to Figure 2-9. Which country has a comparative advantage in the production of cashews?
- A) Indonesia
  - B) They have equal productive abilities.
  - C) Pakistan
  - D) neither country

Answer: C

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 23) Refer to Figure 2-9. If the two countries have the same amount of resources and the same technological knowledge, which country has an absolute advantage in the production of cotton?
- A) Indonesia
  - B) They have the same advantage.
  - C) Pakistan
  - D) cannot be determined

Answer: A

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-10

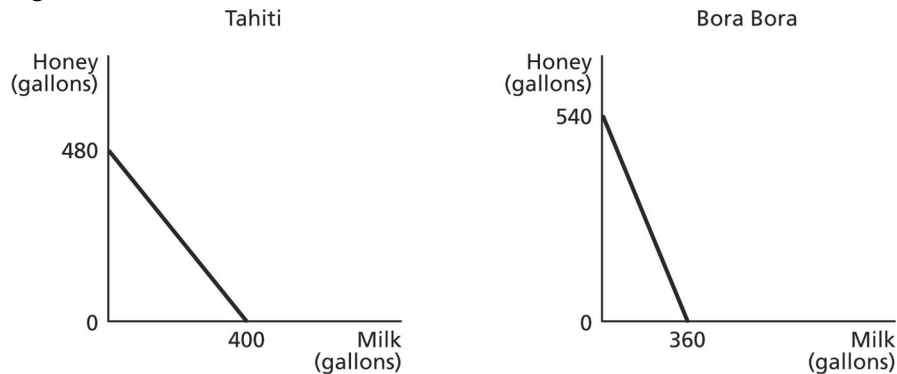


Figure 2-10 shows the production possibilities frontiers for Tahiti and Bora Bora. Each country produces two goods, milk and honey.

- 24) Refer to Figure 2-10. What is the opportunity cost of producing one gallon of milk in Tahiti?
- A) 1/2 gallon of honey
  - B) 5/6 gallon of honey
  - C) 1.2 gallons of honey
  - D) 1.5 gallons of honey

Answer: C

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

25) **Refer to Figure 2-10.** What is the opportunity cost of producing one gallon of milk in Bora Bora?

- A)  $\frac{2}{3}$  gallon of honey
- B) 0.8 gallon of honey
- C) 1.125 gallons of honey
- D) 1.5 gallons of honey

Answer: D

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

26) **Refer to Figure 2-10.** What is the opportunity cost of producing one gallon of honey in Tahiti?

- A)  $\frac{5}{6}$  gallon of milk
- B) 0.9 gallon of milk
- C) 1.2 gallons of milk
- D)  $1\frac{1}{3}$  gallons of milk

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

27) **Refer to Figure 2-10.** What is the opportunity cost of producing one gallon of honey in Bora Bora?

- A)  $\frac{2}{3}$  gallon of milk
- B) 0.9 gallon of milk
- C)  $1\frac{1}{3}$  gallons of milk
- D) 1.5 gallons of milk

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

28) **Refer to Figure 2-10.** Which country has a comparative advantage in the production of milk?

- A) Bora Bora
- B) They have equal productive abilities.
- C) Tahiti
- D) neither country

Answer: C

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

29) **Refer to Figure 2-10.** Which country has a comparative advantage in the production of honey?

- A) Bora Bora
- B) They have equal productive abilities.
- C) Tahiti
- D) neither country

Answer: A

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 30) **Refer to Figure 2-10.** If the two countries have the same amount of resources and the same technological knowledge, which country has an absolute advantage in the production of milk?
- A) Bora Bora  
B) They have the same advantage.  
C) Tahiti  
D) cannot be determined

Answer: C

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 31) Which of the following statements is *true*?
- A) Individuals who have never been the best at doing anything cannot have a comparative advantage in producing any product.  
B) Individuals who have never been the best at doing anything can still have a comparative advantage in producing some product.  
C) Individuals who have never been the best at doing anything perform all tasks at a higher opportunity cost than others.  
D) Individuals who have never been the best at doing anything must have an absolute advantage in at least ones task.

Answer: B

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 2-8**

	One Digital Camera	Wheat (per pound)
China	100 hours	4 hours
South Korea	60 hours	3 hours

Table 2-8 shows the number of labor hours required to produce a digital camera and a pound of wheat in China and South Korea.

- 32) **Refer to Table 2-8.** Does either China or South Korea have an absolute advantage and if so, in what product?
- A) South Korea has an absolute advantage in wheat.  
B) China has an absolute advantage in wheat.  
C) South Korea has an absolute advantage in both products.  
D) China has an absolute advantage in digital cameras.

Answer: C

Diff: 2 Page Ref: 47-48

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

33) *Refer to Table 2–8.* What is China's opportunity cost of producing one digital camera?

- A) 0.04 pounds of wheat
- B) 4 pounds of wheat
- C) 25 pounds of wheat
- D) 40 pounds of wheat

Answer: C

Diff: 2 Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

34) *Refer to Table 2–8.* What is South Korea's opportunity cost of producing one digital camera?

- A) 0.05 pounds of wheat
- B) 20 pounds of wheat
- C) 25 pounds of wheat
- D) 60 pounds of wheat

Answer: B

Diff: 2 Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

35) *Refer to Table 2–8.* What is China's opportunity cost of producing one pound of wheat?

- A) 0.04 units of a digital camera
- B) 4 digital cameras
- C) 25 digital cameras
- D) 40 digital cameras

Answer: A

Diff: 2 Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

36) *Refer to Table 2–8.* What is South Korea's opportunity cost of producing one pound of wheat?

- A) 60 digital cameras
- B) 20 digital cameras
- C) 5 digital cameras
- D) 0.05 units of a digital camera

Answer: D

Diff: 2 Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

37) *Refer to Table 2–8.* China has a comparative advantage in the production of

- A) wheat.
- B) digital cameras.
- C) both products.
- D) neither product.

Answer: A

Diff: 2 Page Ref: 47–48

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

38) **Refer to Table 2–8.** South Korea has a comparative advantage in the production of

- A) wheat.
- B) digital cameras.
- C) both products.
- D) neither product.

Answer: B

Diff: 2 Page Ref: 47–48

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

39) **Refer to Table 2–8.** If the two countries specialize and trade, who should export wheat?

- A) There is no basis for trade between the two countries.
- B) China
- C) South Korea
- D) They should both be exporting wheat.

Answer: B

Diff: 2 Page Ref: 47–48

Topic: Specialization

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

40) **Refer to Table 2–8.** If the two countries specialize and trade, who should export digital cameras?

- A) There is no basis for trade between the two countries.
- B) China
- C) South Korea
- D) They should both be importing digital cameras.

Answer: C

Diff: 2 Page Ref: 47–48

Topic: Specialization

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 2–9**

	One Canoe	One Sailboat
Guatemala	10 hours	60 hours
Honduras	15 hours	75 hours

Table 2–9 shows the number of labor hours required to produce a canoe and a sailboat in Guatemala and Honduras.

41) **Refer to Table 2–9.** Does either Guatemala or Honduras have an absolute advantage and if so, in what product?

- A) Guatemala only has an absolute advantage in producing canoes.
- B) Honduras only has an absolute advantage in producing canoes.
- C) Guatemala has an absolute advantage in producing both products.
- D) Honduras only has an absolute advantage in producing sailboats.

Answer: C

Diff: 2 Page Ref: 47–48

Topic: Absolute Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

42) *Refer to Table 2–9.* What is Honduras's opportunity cost of producing one sailboat?

- A) 1/5 of a canoe      B) 1.5 canoes      C) 4 canoes      D) 5 canoes

Answer: D

Diff: 2      Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

43) *Refer to Table 2–9.* What is Guatemala's opportunity cost of producing one sailboat?

- A) 1/6 of a canoe      B) 2/3 of a canoe      C) 3 canoes      D) 6 canoes

Answer: D

Diff: 2      Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

44) *Refer to Table 2–9.* What is Honduras's opportunity cost of producing one canoe?

- A) 1/5 of a sailboat      B) 1.5 sailboats  
C) 5 sailboats      D) 6 sailboats

Answer: A

Diff: 2      Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

45) *Refer to Table 2–9.* What is Guatemala's opportunity cost of producing one canoe?

- A) 1/6 of a sailboat      B) 2/3 of a sailboat  
C) 6 sailboats      D) 7.5 sailboats

Answer: A

Diff: 2      Page Ref: 47–48

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

46) *Refer to Table 2–9.* Honduras has a comparative advantage in the production of

- A) canoes.      B) sailboats.  
C) both products.      D) neither product.

Answer: B

Diff: 2      Page Ref: 47–48

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

47) *Refer to Table 2–9.* Guatemala has a comparative advantage in the production of

- A) canoes.      B) sailboats.  
C) both products.      D) neither product.

Answer: A

Diff: 2      Page Ref: 47–48

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

48) **Refer to Table 2-9.** If the two countries specialize and trade, who should export sailboats?

- A) There is no basis for trade between the two countries.
- B) Guatemala
- C) Honduras
- D) They should both be importing sailboats.

Answer: C

Diff: 2 Page Ref: 47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

49) **Refer to Table 2-9.** If the two countries specialize and trade, who should export canoes?

- A) There is no basis for trade between the two countries.
- B) Guatemala
- C) Honduras
- D) They should both be exporting canoes.

Answer: B

Diff: 2 Page Ref: 47-48

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

50) If the best surgeon in town is also the best at cleaning swimming pools, then according to economic reasoning, this person should

- A) pursue the activity he enjoys more.
- B) specialize in cleaning swimming pools because it is more labor-intensive.
- C) split his time evenly between being a surgeon and cleaning swimming pools.
- D) specialize in being a surgeon because its opportunity cost is lower.

Answer: D

Diff: 1 Page Ref: 46

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

51) Rayburn Reed is a highly talented photographer. He has chosen to specialize in photography because of all of the following *except*

- A) he obviously has a comparative advantage in photography.
- B) his opportunity cost of pursuing another career is very low.
- C) for him, this is the most lucrative way to purchase the products that he wants to consume.
- D) his photographs are highly esteemed by art lovers who are willing to pay very high prices.

Answer: B

Diff: 3 Page Ref: 46

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

**Table 2-10**

	<b>Tammi</b>	<b>Horace</b>
Dogs Groomed	20	12
Cats Bathed	10	8

Table 2-10 shows the output per day of two pet groomers, Tammi and Horace. They can either devote their time to grooming dogs or bathing cats.

52) *Refer to Table 2-10.* Which of the following statements is *true*?

- A) Horace has an absolute advantage in both tasks.
- B) Tammi has an absolute advantage in both tasks.
- C) Horace has an absolute advantage in dog grooming and Tammi in cat bathing.
- D) Horace has an absolute advantage in cat bathing and Tammi in dog grooming.

Answer: B

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

53) *Refer to Table 2-10.* What is Horace's opportunity cost of grooming a dog?

- A) half a bathed cat
- B) two bathed cats
- C) two-thirds of a bathed cat
- D) one and a half bathed cats

Answer: C

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

54) *Refer to Table 2-10.* What is Horace's opportunity cost of bathing a cat?

- A) half a groomed dog
- B) two groomed dogs
- C) two-thirds of a groomed dog
- D) one and a half groomed dogs

Answer: D

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

55) *Refer to Table 2-10.* What is Tammi's opportunity cost of grooming a dog?

- A) half a bathed cat
- B) two bathed cats
- C) two-thirds of a bathed cat
- D) one and a half bathed cats

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking



56) **Refer to Table 2-10.** What is tammi's opportunity cost of bathing a cat?

- A) half a groomed dog
- B) two groomed dogs
- C) two-thirds of a groomed dog
- D) one and a half groomed dogs

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

57) **Refer to Table 2-10.** Which of the following statements is true?

- A) Horace has a comparative advantage in both tasks.
- B) Tammi has a comparative advantage in both tasks.
- C) Horace has a comparative advantage in grooming dogs and Tammi in bathing cats.
- D) Horace has a comparative advantage in bathing cats and Tammi in grooming dogs.

Answer: D

Diff: 3 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

58) For each surfboard that Australia produces, it gives up the opportunity to make 25 boomerangs. New Zealand can produce 1 surfboard for every 15 boomerangs it produces. Which of the following is true about the comparative advantage between the two countries?

- A) Australia has the comparative advantage in surfboards.
- B) Australia has the comparative advantage in boomerangs.
- C) New Zealand has the comparative advantage in surfboards and boomerangs.
- D) New Zealand has the comparative advantage in boomerangs.

Answer: B

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 2-11**

	One Motorcycle	One Guitar
Ireland	20 hours	4 hours
Scotland	8 hours	2 hours

Table 2-11 shows the number of labor hours required to produce a motorcycle and a guitar in Ireland and Scotland.

59) **Refer to Table 2-11.** Does either Ireland or Scotland have an absolute advantage and if so, in what product?

- A) Scotland only has an absolute advantage in guitars.
- B) Ireland only has an absolute advantage in guitars.
- C) Scotland has an absolute advantage in both products.
- D) Ireland only has an absolute advantage in motorcycles.

Answer: C

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

60) **Refer to Table 2-11.** What is Ireland's opportunity cost of producing one motorcycle?

- A) 0.2 guitar                      B) 5 guitars                      C) 8 guitars                      D) 32 guitars

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

61) **Refer to Table 2-11.** What is Scotland's opportunity cost of producing one motorcycle?

- A) 0.25 guitar                      B) 4 guitars                      C) 12 guitars                      D) 16 guitars

Answer: B

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

62) **Refer to Table 2-11.** What is Ireland's opportunity cost of producing one guitar?

- A) 0.2 motorcycle                      B) 5 motorcycles                      C) 8 motorcycles                      D) 32 motorcycles

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

63) **Refer to Table 2-11.** What is Scotland's opportunity cost of producing one guitar?

- A) 0.25 motorcycle                      B) 4 motorcycles  
C) 12 motorcycles                      D) 16 motorcycles

Answer: A

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

64) **Refer to Table 2-11.** Ireland has a comparative advantage in the production of

- A) both products.                      B) guitars.  
C) motorcycles.                      D) neither product.

Answer: B

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

65) **Refer to Table 2-11.** Scotland has a comparative advantage in the production of

- A) both products.
- B) guitars.
- C) motorcycles.
- D) neither product.

Answer: C

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

66) **Refer to Table 2-11.** If the two countries specialize and trade, who should export guitars?

- A) There is no basis for trade between the two countries.
- B) Ireland
- C) Scotland
- D) They should both be exporting guitars.

Answer: B

Diff: 2 Page Ref: 46

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

67) **Refer to Table 2-11.** If the two countries specialize and trade, who should export motorcycles?

- A) There is no basis for trade between the two countries.
- B) Ireland
- C) Scotland
- D) They should both be importing motorcycles.

Answer: C

Diff: 2 Page Ref: 46

Topic: Specialization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

68) As women's wages have risen relative to men's wages, the opportunity cost to women of doing housework has \_\_\_\_\_ than has the opportunity cost to men.

- A) increased less
- B) increased more
- C) decreased more
- D) decreased less

Answer: B

Diff: 2 Page Ref: 49

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

69) If Sanjaya can shuck more oysters in one hour than Tatiana, then Sanjaya has a comparative advantage in shucking oysters.

Answer: FALSE

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 70) The basis for trade is comparative advantage, not absolute advantage.

Answer: TRUE

Diff: 1 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 71) If a country produces only two goods, it is possible to have a comparative advantage in the production of both those goods.

Answer: FALSE

Diff: 1 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 72) In a two-good, two country world, if one country has an absolute advantage in the production of both goods, it cannot benefit by trading with the other country.

Answer: FALSE

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 73) For a person to have a comparative advantage in producing a product, she must be able to produce that product at a lower opportunity cost than her competitors.

Answer: TRUE

Diff: 1 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 74) It is possible to have a comparative advantage in producing a good or service without having an absolute advantage.

Answer: TRUE

Diff: 1 Page Ref: 47

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 75) If Tanisha can audit more tax returns in one hour than Libby, then Tanisha has an absolute advantage in auditing tax returns.

Answer: TRUE

Diff: 2 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 76) If a country produces only two goods, then it is not possible to have an absolute advantage in the production of both those goods.

Answer: FALSE

Diff: 1 Page Ref: 46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 77) In a two-good, two country world, if one country has an absolute advantage in the production of both goods, it must also have a comparative advantage in the production of both goods.

Answer: FALSE

Diff: 2 Page Ref: 46

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 78) If the opportunity cost of producing more of one good remains the same as more of that good is produced, then the production method is inefficient.

Answer: FALSE

Diff: 2 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 79) It is possible to have an absolute advantage in producing a good or service without having a comparative advantage.

Answer: TRUE

Diff: 1 Page Ref: 47

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 80) What is comparative advantage? What is absolute advantage?

Answer: Comparative advantage is the ability of an individual, firm, or country to produce a good or service at a lower opportunity cost than competitors. Absolute advantage is the ability of an individual, firm, or country to produce more of a good or service than competitors, using the same amount of resources.

Diff: 1 Page Ref: 45-46

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 81) Is it possible for a firm to have an absolute advantage in producing something without having a comparative advantage? Why or why not?

Answer: Yes, a firm can have an absolute advantage without having a comparative advantage. A firm may be able to produce more of a good or service than its competitors, but that does not necessarily mean it can produce the good or service at a lower opportunity cost than its competitors.

Diff: 2 Page Ref: 45–46

Topic: Absolute Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 82) Suppose in Belize, the opportunity cost of producing a sailboat is 5 hang gliders. In Honduras, the opportunity cost of producing a sailboat is 8 hang gliders.

- What is the opportunity cost of producing a hang glider for Belize?
- What is the opportunity cost of producing a hang glider for Honduras?
- Which country has a comparative advantage in the production of hang gliders?
- Which country has a comparative advantage in the production of sailboats?

Answer: a. For Belize, the opportunity cost of producing a hang glider is 1/5 of a sailboat.  
 b. For Honduras, the opportunity cost of producing a hang glider is 1/8 of a sailboat.  
 c. Honduras has a comparative advantage in the production of hang gliders.  
 d. Belize has a comparative advantage in the production of sailboats.

Diff: 3 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 83) Suppose in the Germany, the opportunity cost of producing a gallon of beer is 5 gallons of wine. In Italy, the opportunity cost of producing a gallon of beer is 3 gallons of wine.

- What is the opportunity cost of producing a gallon of wine for Germany?
- What is the opportunity cost of producing a gallon of wine for Italy?
- Which country has a comparative advantage in the production of beer?
- Which country has a comparative advantage in the production of wine?

Answer: a. For Germany, the opportunity cost of producing a gallon of wine is 1/4 of a gallon of beer.  
 b. For Italy, the opportunity cost of producing a gallon of wine is 1/3 of a gallon of beer.  
 c. Germany has a comparative advantage in the production of wine.  
 d. Italy has a comparative advantage in the production of beer.

Diff: 3 Page Ref: 46

Topic: Opportunity Cost

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

Table 2-12

	Digital Camera	Wheat (bushels)
China	100 hours	5 hours
South Korea	90 hours	3 hours

- 84) *Refer to Table 2-12.* This table shows the number of labor hours required to produce a digital camera and a bushel of wheat in China and South Korea.
- If each country has a total of 9,000 labor hours to devote to the production of the two goods, draw the production possibilities frontier for each country. Put "Digital Camera" on the horizontal axis and "Wheat" on the vertical axis. Be sure to identify the intercept values on your graphs.
  - Suppose each country allocates 60% of its labor hours to wheat production and 40% to the production of digital cameras. Complete Table 2-13 below to show each country's output of the two products.

Table 2-13: Production and Consumption with no Trade

	Digital Camera Output	Wheat Output (bushels)
China		
South Korea		
Total		

- If the two countries do not trade and consume whatever they produce, identify the current production and consumption point for each country on their respective production possibilities frontiers. Label China's consumption point "C" and South Korea's consumption point, "K."
- Suppose the two countries specialize and trade. Who should produce digital cameras and who should produce wheat? Explain your answer.
- Complete Table 2-14 below to show each country's output with specialization.

Table 2-14: Output with Specialization

	Digital Camera Output	Wheat Output (bushels)
China		
South Korea		
Total		

- Did specialization increase the combined output for the two countries without any increase in resources? If so, by how much?
- Suppose China and South Korea agree to trade so that in exchange for 1,200 bushels of wheat, the exporter of wheat receives 48 digital cameras. Complete Table 2-15 below to show each country's consumption bundle after trade.

Table 2-15: Consumption with Trade

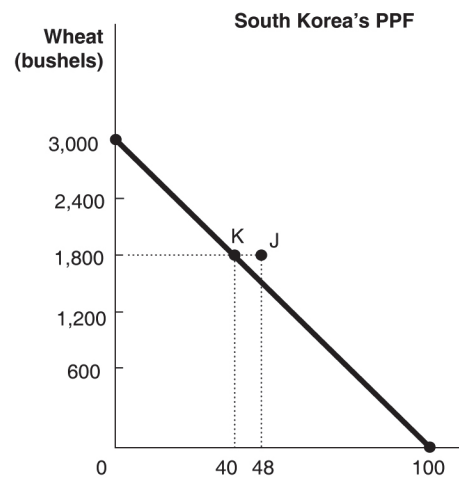
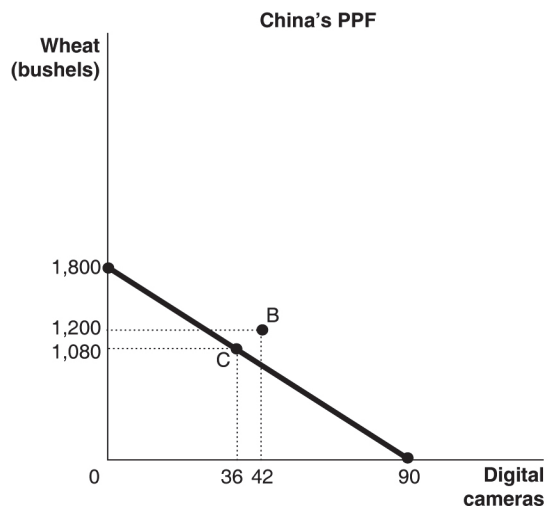
	Digital Camera	Wheat (bushels)
China		
South Korea		

- Show the consumption points after trade on each country's production possibilities frontier.

Label these points "B" for China and "J" for South Korea.

i. Has trade made the two countries better off? Explain your answer.

Answer: a.





b.

**Table 2-13: Production and Consumption with no Trade**

	Digital Camera Output	Wheat Output (bushels)
China	36	1,080
South Korea	40	1,800
<b>Total</b>	<b>76</b>	<b>2,880</b>

c. See graph in part (a)

d. China should specialize in producing digital cameras because it has a lower opportunity cost: 0.05 units of wheat as opposed to South Korea's 0.03 units of wheat. South Korea should specialize in producing wheat because it has a lower opportunity cost: 0.03 units of a digital camera as opposed to China's 0.05 units of a digital camera.

e.

**Table 2-14: Output with Specialization**

	Digital Camera Output	Wheat Output (bushels)
China	90	0
South Korea	0	3,000
<b>Total</b>	<b>90</b>	<b>3,000</b>

f. Yes, digital camera output increased by 14 units (from 76 units to 90 units) and wheat output increased by 120 bushels (from 2,880 bushels to 3,000 bushels).

g.

**Table 2-15: Consumption with Trade**

	Digital Camera	Wheat (bushels)
China	42	1,200
South Korea	48	1,800

h. See graph in part (a)

i. Yes, trade has enabled the two countries to consume outside their PPFs.

Diff: 3 Page Ref: 48-49

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

**Table 2-16**

	One Motorcycle	One Guitar
Ireland	10 hours	2.5 hours
Scotland	9 hours	2 hours

85) *Refer to Table 2-16.* This table shows the number of labor hours required to produce a motorcycle and a guitar in Ireland and Scotland.

- Which country has an absolute advantage in the production of motorcycles?
- Which country has an absolute advantage in the production of guitars?
- What is Ireland's opportunity cost of producing one motorcycle?
- What is Scotland's opportunity cost of producing one motorcycle?
- What is Ireland's opportunity cost of producing one guitar?
- What is Scotland's opportunity cost of producing one guitar?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce motorcycles?
- If each country specializes in the production of the product in which it has a comparative advantage, who should produce guitars?

Answer: a. Scotland has an absolute advantage in the production of motorcycles.  
 b. Scotland has an absolute advantage in the production of guitars.  
 c. Ireland's opportunity cost of producing one motorcycle is 4 guitars.  
 d. Scotland's opportunity cost of producing one motorcycle is 4.5 guitars  
 e. Ireland's opportunity cost of one guitar is 0.25 motorcycle.  
 f. Scotland's opportunity cost of one guitar is 0.22 motorcycle.  
 g. Ireland should specialize in producing motorcycles.  
 h. Scotland should specialize in producing guitars.

Diff: 3 Page Ref: 44-46

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

**Table 2-17**

	One Motorcycle	One Guitar
Ireland	10 hours	2.5 hours
Scotland	9 hours	2 hours

86) *Refer to Table 2-17.* This table shows the number of labor hours required to produce a motorcycle and guitar in Ireland and Scotland.

- If each country has a total of 2,700 labor hours to devote to the production of the two goods, draw the production possibilities frontier for each country. Put "Motorcycle" on the horizontal axis and "Guitar" on the vertical axis. Be sure to identify the intercept values on your graphs.
- Suppose each country allocates 55% of its labor hours to guitar production and 45% to the production of motorcycles. Complete Table 2-18 below to show each country's output of the two products.

*Table 2-18: Production and Consumption with no Trade*

	Motorcycle Output	Guitar Output
Ireland		
Scotland		
Total		

- c. If the two countries do not trade and consume whatever they produce, identify the current production and consumption point for each country on their respective production possibilities frontiers. Label Ireland's consumption point "T" and Scotland's consumption point, "S."
- d. Suppose the two countries specialize and trade. Who should produce motorcycles and who should produce guitars? Explain your answer.
- e. Complete Table 2-19 below to show each country's output with specialization.

*Table 2-19: Output with Specialization*

	Motorcycle Output	Guitar Output
Ireland		
Scotland		
Total		

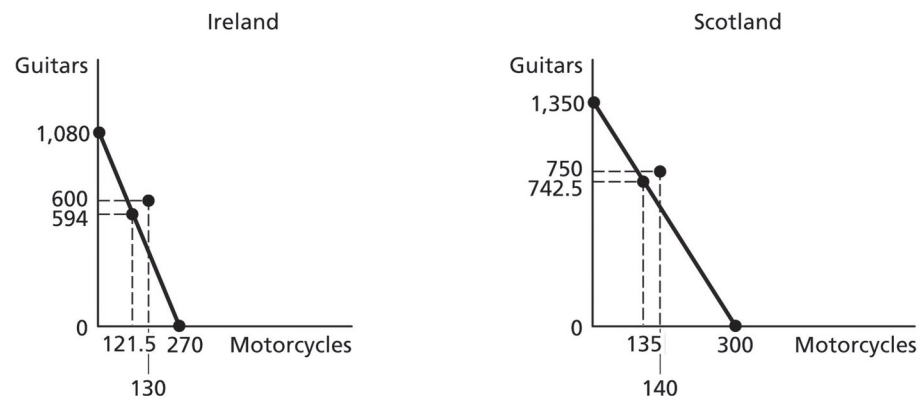
- f. Did specialization increase the combined output for the two countries without any increase in resources? If so, by how much?
- g. Suppose Ireland and Scotland agree to trade so that in exchange for 600 guitars, the exporter of guitars receives 140 motorcycles. Complete Table 2-20 below to show each country's consumption bundle after trade.

*Table 2-20: Consumption with Trade*

	Motorcycles	Guitars
Ireland		
Scotland		

- h. Show the consumption points after trade on each country's production possibilities frontier. Label these points "X" for Ireland and "Y" for Scotland.
- i. Has trade made the two countries better off? Explain your answer.

Answer: a.



b.

**Table 2-18: Production and Consumption with no Trade**

	Motorcycle Output	Guitar Output
Ireland	121.5	594
Scotland	135	742.5
<b>Total</b>	256.5	1,336.5

c. See graph in part (a)

d. Ireland should specialize in producing motorcycles because it has a lower opportunity cost of producing guitars as opposed to Scotland's 4.5 guitars. Scotland should specialize in producing guitar because it has a lower opportunity cost 0.22 motorcycle as opposed to Ireland's 0.25 motorcycle.

e.

**Table 2-19: Output with Specialization**

	Motorcycle Output	Guitar Output
Ireland	270	0
Scotland	0	1,350
<b>Total</b>	270	1,350

f. Yes, motorcycle output increased by 13.5 units (from 256.5 units to 270 units) and guitar output increased by 13.5 (from 1,336.5 to 1,350).

g.

**Table 2-20: Consumption with Trade**

	Motorcycles	Guitars
Ireland	130	600
Scotland	140	750

h. See graph in part (a)

i. Yes, trade has enabled the two countries to consume outside their PPFs. (Compare Table 2-20 with Table 2-18)

Diff: 3 Page Ref: 48–49

Topic: Specialization

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

**Table 2-12**

	Digital Camera	Wheat (bushels)
China	100 hours	5 hours
South Korea	90 hours	3 hours

87) Refer to Table 2-12. This table shows the number of labor hours required to produce a digital camera and a bushel of wheat in China and South Korea.

- Which country has an absolute advantage in the production of digital cameras?
- Which country has an absolute advantage in the production of wheat?
- What is China's opportunity cost of producing one digital camera?
- What is South Korea's opportunity cost of producing one digital camera?
- What is China's opportunity cost of producing one bushel of wheat?
- What is South Korea's opportunity cost of producing one bushel of wheat?

- g. If each country specializes in the production of the product in which it has a comparative advantage, who should produce digital cameras?
- h. If each country specializes in the production of the product in which it has a comparative advantage, who should produce wheat?

Answer: a. South Korea has an absolute advantage in the production of digital cameras.  
 b. South Korea has an absolute advantage in wheat production.  
 c. China's opportunity cost of producing one digital camera is 20 bushels of wheat.  
 d. South Korea's opportunity cost of producing one digital camera is 30 bushels of wheat  
 e. China's opportunity cost of one bushel of wheat is 0.05 units of a digital camera.  
 f. South Korea's opportunity cost of one bushel of wheat is 0.03 units of a digital camera.  
 g. China should specialize in producing digital cameras.  
 h. South Korea should specialize in producing wheat.

Diff: 3 Page Ref: 44–46

Topic: Specialization

Learning Outcome: Micro–20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

## 2.3 The Market System

- 1) Which of the following is *not* a factor of production?

A) an acre of farmland  
 B) a drill press in a machine shop  
 C) the manager of the local tire shop  
 D) \$1,000 in cash

Answer: D

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 2) Which of the following is a factor of production?

A) an oven in a bakery  
 B) a share of General Motors' stock  
 C) a credit card  
 D) a \$500 Treasury bond

Answer: A

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 3) An example of a factor of production is

A) stock issued by Dell.  
 B) the computers exported by Dell.  
 C) a computer produced by an Dell.  
 D) a worker hired by Dell.

Answer: D

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 4) If a commercial dairy farm wants to raise funds to purchase feeding troughs, it does so in the
- A) output market.
  - B) product market.
  - C) factor market.
  - D) dairy products market.

Answer: C

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 5) The natural resources used in production are made available in the
- A) goods and services market.
  - B) product market.
  - C) government market.
  - D) factor market.

Answer: D

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 6) When you purchase a new pair of jeans you do so in the
- A) factor market.
  - B) input market.
  - C) product market.
  - D) resource market.

Answer: C

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 7) The resource income earned by those who supply \_\_\_\_\_ is called wages.
- A) labor
  - B) capital
  - C) natural resources
  - D) entrepreneurship

Answer: A

Diff: 1 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 8) Which of the following statements about an entrepreneur is *false*?
- A) organizes the other factors of production into a working unit
  - B) develops the vision for the firm and funds the producing unit
  - C) sells his entrepreneurial services in the output market
  - D) risks the personal funds provided

Answer: C

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

9) The \_\_\_\_\_ demonstrates the roles played by households and firms in the market system.

- |                                      |                        |
|--------------------------------------|------------------------|
| A) production possibilities frontier | B) circular flow model |
| C) theory of comparative advantage   | D) business cycle      |

Answer: B

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

10) Households

- A) have no influence on the circular flow in a market economy.
- B) purchase resources in the factor market.
- C) sell goods in the product market.
- D) sell resources in the factor market.

Answer: D

Diff: 1 Page Ref: 50

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

11) Households \_\_\_\_\_ final goods and services in the \_\_\_\_\_ market.

- |                     |                      |
|---------------------|----------------------|
| A) purchase; factor | B) purchase; product |
| C) sell; factor     | D) sell; product     |

Answer: B

Diff: 1 Page Ref: 50

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

12) In the circular flow model, producers

- A) sell goods and services in the input market.
- B) and households spend earnings from resource sales on goods and services in the factor market.
- C) hire resources sold by households in the factor market.
- D) spend earnings from resource sales on goods and services in the product market.

Answer: C

Diff: 1 Page Ref: 50

Topic: The Circular Flow of Income

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

13) Which of the following is a flow in the circular flow model?

- A) the flow of goods and services from households to firms
- B) the flow of profit and the flow of revenue
- C) the flow of income earned by firms and the flow of expenditures earned by households
- D) the flow of revenue received by firms and the flow of payments to resource owners

Answer: D

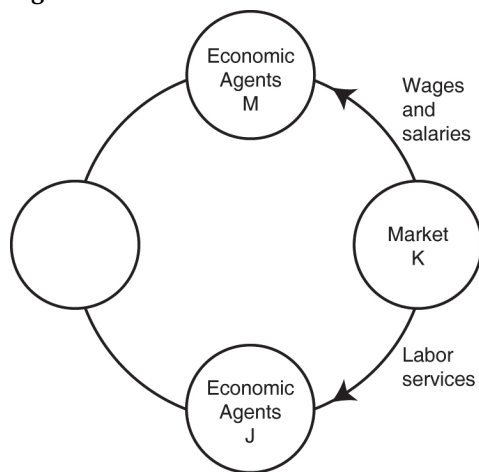
Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Figure 2-11



14) Refer to Figure 2-11. One segment of the circular flow diagram in the figure shows the flow of labor services from market K to economic agents J. What is market K and who are economic agents J?

- A) K = factor markets; J = households
- B) K = product markets; J = households
- C) K = factor markets; J = firms
- D) K = product markets; J = firms

Answer: C

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

15) Refer to Figure 2-11. One segment of the circular flow diagram in the figure shows the flow of wages and salaries from market K to economic agents M. What is market K and who are economic agents M?

- A) K = factor markets; M = households
- B) K = product markets; M = households
- C) K = factor markets; M = firms
- D) K = product markets; M = firms

Answer: A

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking



- 16) Which of the following are separate flows in the circular flow model?
- A) the flow of goods and the flow of services
  - B) the flow of costs and the flow of revenue
  - C) the flow of income earned from the sale of resources and the flow of expenditures on goods and services.
  - D) the flow of income received by households and the flow of tax revenues paid by households

Answer: C

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 17) Which of the following statements about a simple circular flow model is *false*?

- A) Producers are buyers in the factor market and sellers in the product market.
- B) Households are neither buyers nor sellers in the input market.
- C) Producers are buyers in the factor market.
- D) Households are sellers in the product market.

Answer: B

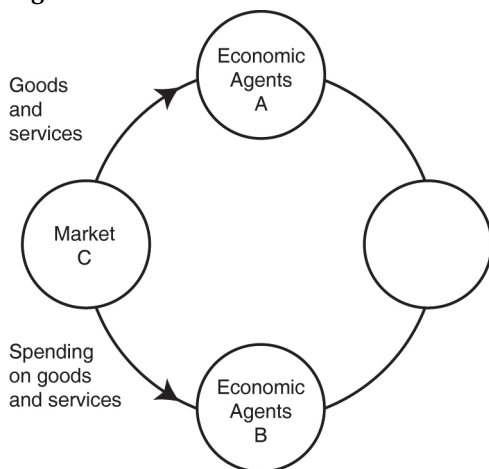
Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Figure 2-12**



- 18) *Refer to Figure 2-12.* One segment of the circular flow diagram in the figure shows the flow of goods and services from market C to economic agents A. What is market C and who are economic agents A?
- A) C = factor markets; A = households
  - B) C = product markets; A = households
  - C) C = factor markets; A = firms
  - D) C = product markets; A = firms

Answer: B

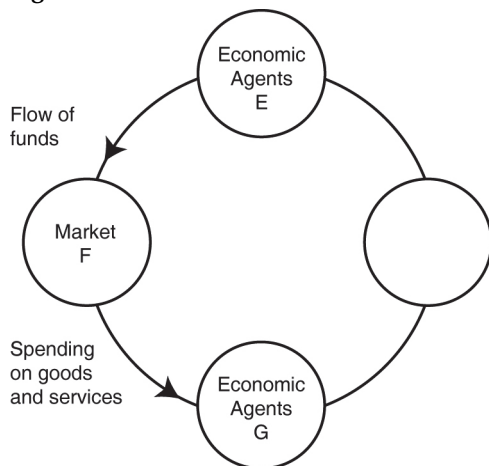
Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

Figure 2-13



- 19) Refer to Figure 2-13. One segment of the circular flow diagram in the figure shows the flow of funds from economic agents *E* to market *F*. Who are economic agents *E* and what is market *F*?

A) *E* = households; *F* = product markets      B) *E* = firms; *F* = product markets  
 C) *E* = households ; *F* = factor markets      D) *E* = firms; *F* = factor markets

Answer: A

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 20) All of the following are examples of spending on factors of production in the circular flow model *except*

A) Bima hires two students to work at his ice-cream store.  
 B) "Get Fit Together" purchases 3 new treadmills for its gym.  
 C) Iris buys a dozen roses for her mother's birthday.  
 D) The Banyan Tree rents a much larger property so that it can add a restaurant to its facilities.

Answer: C

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 21) Which of the following is an example of spending on factors of production in the circular flow model?

A) Carolina has her nails done before her 20th high school class reunion.  
 B) Giorgio buys snow cones for his youth soccer team after each game.  
 C) Stevie trades in his old cell phone for a newer model.  
 D) Arlisha purchases a cotton candy machine for her concession stand at the state fair.

Answer: D

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

22) Which of the following is an example of spending on goods and services in the circular flow model?

- A) Belinda purchases a new computer for her tax-preparation business.
- B) Javier buys 800 square feet of wood flooring for his vacation home.
- C) Celeste buys fresh herbs at the farmers' market to use in her restaurant.
- D) Timmy purchases a new examination table for use in his veterinary clinic.

Answer: B

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

23) "An Inquiry into the Nature and Causes of the Wealth of Nations" published in 1776 was written by

- A) John Maynard Keynes.
- B) Karl Marx.
- C) Alfred Marshall.
- D) Adam Smith.

Answer: D

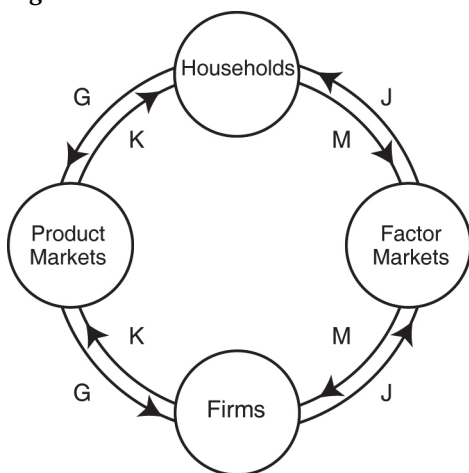
Diff: 1 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

Figure 2-14



24) Refer to Figure 2-14. Which two arrows in the diagram depict the following transaction: LaDonna sells 20 pairs of sunglasses at the Oakley store.

- A) J and M
- B) J and G
- C) K and M
- D) K and G

Answer: D

Diff: 2 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 25) **Refer to Figure 2-14.** Which two arrows in the diagram depict the following transaction: Dorian Gray hires "Wild Oscar," a professional portrait artist, to paint his picture.

A) J and M                      B) K and G                      C) K and M                      D) J and G

Answer: B

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 26) **Refer to Figure 2-14.** Which two arrows in the diagram depict the following transaction: Barney earns \$250 for selling scissors and razors to Floyd's Barber Shop.

A) J and M                      B) K and G                      C) K and M                      D) J and G

Answer: A

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 27) **Refer to Figure 2-14.** Which two arrows in the diagram depict the following transaction: Myrna earns \$450 for working at HempHill's Drug Store.

A) J and M                      B) K and G                      C) K and M                      D) J and G

Answer: A

Diff: 2      Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 28) Adam Smith's behavioral assumption about humans was that people

A) typically act irrationally.  
 B) usually act in a rational, self-interested way.  
 C) are consistently greedy.  
 D) typically act randomly.

Answer: B

Diff: 1      Page Ref: 52

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 29) All of the following countries come close to the free market benchmark *except*

A) Canada.                      B) North Korea.                      C) Germany.                      D) Singapore.

Answer: B

Diff: 1      Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 30) Adam Smith's invisible hand refers to
- A) the government's unobtrusive role in ensuring that the economy functions efficiently.
  - B) property ownership laws and the rule of the court system.
  - C) the process by which individuals acting in their own self-interest bring about a market outcome that benefits society as a whole.
  - D) the laws of nature that influence economics decisions.

Answer: C

Diff: 2 Page Ref: 53

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 31) All of the following are critical functions of the government in facilitating the operation of a market economy *except*
- A) protecting private property.
  - B) enforcing property rights.
  - C) ensuring an equal distribution of income to all citizens.
  - D) enforcing contracts.

Answer: C

Diff: 2 Page Ref: 56-58

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 32) The term "property rights" refers to
- A) the physical possession of a house or any other property which the owner legally purchased.
  - B) the ability to exercise control over one's own resources within the confines of the law.
  - C) the government's right to appropriate land from wealthy land owners to redistribute to peasants.
  - D) the right of a business not to have its assets confiscated by the government in the event that the business is accused of committing fraud.

Answer: B

Diff: 1 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 33) The primary purpose of \_\_\_\_\_ is to encourage the expenditure of funds on research and development to create new products.
- A) centrally planned economies
  - B) government-run health care
  - C) nationalizing oil companies
  - D) patents and copyrights

Answer: D

Diff: 1 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 34) A major factor contributing to the slow growth rate of less developed economies is
- A) the lack of well-defined and enforceable property rights.
  - B) the lack of natural resources.
  - C) the lack of workers.
  - D) the high rate of illiteracy.

Answer: A

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 35) A successful market economy requires
- A) a government-controlled banking system and government price controls.
  - B) well-defined property rights and an independent court system to adjudicate disputes based on the law.
  - C) generous unemployment benefits and paid medical leave for everyone in the labor force.
  - D) an equitable distribution of income and limits on immigration.

Answer: B

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 36) Consider the following items:
- a. the novel "The DaVinci Code" by Dan Brown
  - b. the "The Spirited Shipper," an innovative wine shipping box
  - c. a Swiss chef's award-winning recipe
  - d. an original fabric design, for example, the fabric used for "Coach" bags and luggage

Which of the items listed is an example of intellectual property?

- A) a and b only
- B) a, b, and c
- C) a and d only
- D) all of the items listed

Answer: D

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 37) Consider the following items:
- a. the album "21" by Adele
  - b. a Dutch horticulturalist's new method for cultivating hybrid tulips
  - c. Rolls Royce's "Spirit of Ecstasy" hood ornament design
  - d. the sale of Tumi luggage at a Macy's department store

Which of the items listed is an example of intellectual property?

- A) a and b only
- B) a, b, and c
- C) a and d only
- D) all of the items listed

Answer: B

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 38) An organization of producers that limits the amount of a good produced is known as a
- A) free market organization.
  - B) guild.
  - C) collective.
  - D) co-op.

Answer: B

Diff: 1 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 39) In 18th century Europe, governments gave guilds legal authority to limit production of goods. Did this authority obstruct or improve the market mechanism and how?
- A) It improved the market mechanism by making it more efficient because the guilds were able to quickly identify and rectify any market shortages and surpluses.
  - B) It improved the market mechanism because the government's actions provided the correct set of signals to the market so that producers can adjust their output to better meet the needs of consumers.
  - C) It obstructed the market mechanism because the guild's actions prevented the forces of demand and supply from coordinating the self-interested decisions of producers and consumers.
  - D) It obstructed the market mechanism because with one more party having to coordinate activities (the guilds) there were delays in getting the products to consumers.

Answer: C

Diff: 2 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 40) Stricter laws and regulations to protect intellectual property rights
- A) will help to create a more successful market system.
  - B) will only benefit those companies whose intellectual property rights have in the past been ignored.
  - C) will tend to have little impact on an economy since intellectual property is not tangible.
  - D) will create a stronger and more successful black market for intellectual property.

Answer: A

Diff: 1 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 41) If a nation changes its laws to more actively enforce intellectual property rights, all of the following will most likely take place *except*
- A) more software companies will choose to export their products to that country.
  - B) more film makers will choose to do business in that country.
  - C) the black market for intellectual property will become more prosperous in that country.
  - D) foreign investment in that country will increase.

Answer: C

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

42) Which of the following is a factor of production?

- A) a necklace produced by a jewelry manufacturer
- B) 50 shares of Google stock
- C) the security guard at the local bank
- D) \$1,000 in casino chips

Answer: C

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

43) An example of a factor of production is

- A) a bottle of wine produced by a vineyard.
- B) a vintner hired by a vineyard.
- C) a loan granted to a vineyard.
- D) the wine exported by a vineyard.

Answer: B

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

44) If a brewery wants to raise funds to purchase a new fermenting vat, it does so in the

- A) factor market.
- B) output market.
- C) product market.
- D) alcoholic beverages market.

Answer: A

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

45) When you purchase a new set of spurs you do so in the

- A) resource market.
- B) product market.
- C) input market.
- D) factor market.

Answer: B

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



46) Which of the following is an examples of spending on factors of production in the circular flow model?

- A) Orson buys a package of beef jerky at a convenience store.
- B) Bernadette gets a manicure and pedicure before attending her parents' anniversary party.
- C) Landon pays \$100 for a season pass to a water park.
- D) The "Suds Bucket" car wash buys new squeegees for all its employees.

Answer: D

Diff: 2 Page Ref: 50-51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

47) All of the following are examples of spending on goods and services in the circular flow model *except*

- A) Giovanni buys a new cell phone to replace the one he flushed down the toilet.
- B) Amir buys a new humidor for his cigar shop.
- C) Isabella buys the sushi plate for lunch at the Turning Japanese Sushi Bar.
- D) Vijay buys a new minivan for his family's cross-country vacation.

Answer: B

Diff: 2 Page Ref: 50-51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

### Article Summary

Since 2008, the United States has been involved in trade negotiations over the Trans-Pacific Partnership (TPP), a free trade agreement with 11 other countries on both sides of the Pacific Ocean. One area of the negotiations involves patents and intellectual property rights in the pharmaceutical industry. A number of developing countries have ignored international agreements concerning patents and intellectual property rights as a way to benefit their domestic pharmaceutical industries, to the detriment of those companies which have spent considerable time and money developing new medicines. For every 5,000 to 10,000 experimental drugs contemplated, only one will typically gain FDA approval, and this occurs only after up to 15 years of research at an average cost of more than \$1 billion. Also, 30 percent of the U.S. workforce is either directly or indirectly employed in the pharmaceutical industry, so protection of these intellectual property rights is very important for the U.S. economy.

Source: Doug Schoen, "Intellectual Property Rights Matter," *Forbes*, September 24, 2013.

48) *Refer to the Article Summary.* If more developing countries began abiding by international agreements which protect intellectual property rights, all of the following would most likely occur *except*

- A) pharmaceutical companies would increase investment in the development of more experimental drugs.
- B) pharmaceutical companies would consider expanding operations to these developing countries.
- C) more patents would be issued to pharmaceutical companies.
- D) fewer dollars would be spent on the development of new medicines.

Answer: D

Diff: 2 Page Ref: 56

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 49) Because the copyright on the L. Frank Baum book *The Wonderful Wizard of Oz* expired many years ago, the actual written words from the book are in the public domain. Publishers who now choose to sell their own versions of the book
- A) can claim copyright of Baum's words if they are the first to publish the book after the original copyright expired.
  - B) can claim copyright of Baum's words no matter how many versions are published, since the original is in the public domain.
  - C) can not claim copyright of Baum's words since they are in the public domain, but can claim copyright on any new design or illustrations created for the book.
  - D) can not claim copyright of Baum's words, or on any new design or illustrations created for the book, since the original written words are in the public domain.

Answer: C

Diff: 2 Page Ref: 57

Topic: Property Rights

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 50) The payment received by suppliers of entrepreneurial skills is called interest.

Answer: FALSE

Diff: 1 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 51) In the circular flow model, households supply resources such as labor services in the factor market.

Answer: TRUE

Diff: 1 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 52) Entrepreneurs bring together the factors of production to produce goods and services.

Answer: TRUE

Diff: 1 Page Ref: 51

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 53) In a free market there are virtually no restrictions, or at best few restrictions on how factors of production can be employed.

Answer: TRUE

Diff: 1 Page Ref: 51

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 54) Crude oil is not an example of a factor of production, but when crude oil is processed into gasoline, it is a factor of production.

Answer: FALSE

Diff: 2 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 55) Each person goes about her daily business seeking to maximize her own self interests. In doing so, she contributes to the welfare of society at large. This is the idea underlying Adam Smith's "invisible hand."

Answer: TRUE

Diff: 2 Page Ref: 53

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 56) The payment received by suppliers of entrepreneurial skills is called wages.

Answer: FALSE

Diff: 1 Page Ref: 50

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 57) In the circular flow model, households demand resources such as labor services in the factor market.

Answer: FALSE

Diff: 1 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 58) In economics, the term "free market" refers to a market where products are traded but not sold.

Answer: FALSE

Diff: 1 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 59) In a free market there are significant restrictions on how a good or service can be produced or sold.

Answer: FALSE

Diff: 1 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 60) A bed of oysters is not an example of a factor of production but the shucked oysters used to make oyster stew is a factor of production.

Answer: FALSE

Diff: 2 Page Ref: 51

Topic: Factors of Production

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 61) What is the difference between product markets and factor markets?

Answer: Product markets are markets for goods and services. Factor markets are markets for the factors of production, which are the inputs used to make goods and services.

Diff: 1 Page Ref: 50

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 62) How do firms and households interact in markets?

Answer: Firms supply goods and services to households, and buy factors of production from households. Households supply factors of production to firms, and buy goods and services from firms.

Diff: 1 Page Ref: 51

Topic: The Circular Flow of Income

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 63) What is meant by the term "free market"?

Answer: A free market is a market with few government restrictions on how a good or service can be produced or sold or on how factors of production can be employed.

Diff: 1 Page Ref: 52

Topic: Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 64) How does Adam Smith's idea of the "invisible hand" apply to the various parts, made by many different manufacturers in many different countries, that are used by Apple to produce an iPad?

Answer: Smith used the "invisible hand" reference to explain why markets provide consumers with desired products and services. In the case of the iPad, the invisible hand of the market has led these parts manufacturers to contribute their knowledge and resources to the process that ultimately results in a product available for sale in the United States and around the world.

Diff: 3 Page Ref: 53–54

Topic: Markets

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

65) What is a circular flow diagram and what does it demonstrate?

Answer: A circular flow diagram is a model that illustrates how participants in markets are linked. It shows who supplies and purchases factors of production and who supplies and purchases goods and services.

Diff: 2 Page Ref: 50–51

Topic: *The Circular Flow of Income*

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

66) What is an entrepreneur?

Answer: An entrepreneur is someone who operates a business, bringing together the factors of production to produce goods and services.

Diff: 2 Page Ref: 54

Topic: *Elasticity and Economic Issues*

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

67) Identify whether each of the following transactions will take place in the factor market or in the product market.

- a. Graciela buys a Tesla Motors Model X.
- b. Lashan works 60 hours a week at a law firm.
- c. Tito sells his family's farmland to a housing developer.
- d. Tesla Motors increases employment at its Fremont, California plant.

Answer: a takes place in the product market.

b, c, and d take place in the factor market.

Diff: 2 Page Ref: 50

Topic: *Markets*

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

# Chapter 3

## Where Prices Come From: The Interaction of Demand and Supply

### 3.1 The Demand Side of the Market

- 1) The market for smart phones has grown rapidly over the past few years, due in part to the overwhelming success of the Apple iPhone. Following the successful launch of the iPhone in 2007, companies such as Samsung, HTC, and LG have all introduced products to compete with the iPhone. The smart phones introduced to compete with the iPhone would be considered
- A) complements to the iPhone.
  - B) substitutes for the iPhone.
  - C) inferior goods compared to the iPhone.
  - D) normal goods compared to the iPhone.

Answer: B

Diff: 2 Page Ref: 69

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 2) If the Apple iPhone and the Samsung Galaxy are considered substitutes, then, other things equal, an increase in the price of the iPhone will
- A) decrease the demand for the iPhone.
  - B) increase the demand for the Galaxy.
  - C) increase the quantity demanded for the Galaxy.
  - D) increase the quantity demanded for the iPhone.

Answer: B

Diff: 1 Page Ref: 69

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 3) What is the difference between an "increase in demand" and an "increase in quantity demanded"?
- A) There is no difference between the two terms; they both refer to a shift of the demand curve.
  - B) An "increase in demand" is represented by a rightward shift of the demand curve while an "increase in quantity demanded" is represented by a movement along a given demand curve.
  - C) There is no difference between the two terms; they both refer to a movement downward along a given demand curve.
  - D) An "increase in demand" is represented by a movement along a given demand curve, while an "increase in quantity demanded" is represented by a rightward shift of the demand curve.

Answer: B

Diff: 1 Page Ref: 75

Topic: Demand versus Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 4) The demand by all the consumers of a given good or service is the \_\_\_\_\_ for the good or service.

A) market demand  
B) quantity demanded  
C) law of demand  
D) scheduled demand

Answer: A

Diff: 1 Page Ref: 70

Topic: Market Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 5) If, in response to an increase in the price of chocolate the quantity of chocolate demanded decreases, economists would describe this as

A) a decrease in demand.  
B) a decrease in quantity demanded.  
C) a change in consumer income.  
D) a decrease in consumers' taste for chocolate.

Answer: B

Diff: 1 Page Ref: 70

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) By drawing a demand curve with \_\_\_\_\_ on the vertical axis and \_\_\_\_\_ on the horizontal axis, economists assume that the most important determinant of the demand for a good is the \_\_\_\_\_ of the good.

A) quantity; price; quantity  
B) price; quantity; quantity  
C) price; quantity; price  
D) quantity; price; price

Answer: C

Diff: 1 Page Ref: 71

Topic: Demand Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 7) The law of demand implies, holding everything else constant, that

A) as the price of bagels increases, the quantity of bagels demanded will decrease.  
B) as the price of bagels increases, the demand for bagels will decrease.  
C) as the price of bagels increases, the quantity of bagels demanded will increase.  
D) as the price of bagels increases, the demand for bagels will increase.

Answer: A

Diff: 1 Page Ref: 71

Topic: Law of Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

8) If a demand curve shifts to the right, then

- A) demand has increased.  
C) demand has decreased.

- B) quantity demanded has increased.  
D) quantity demanded has decreased.

Answer: A

Diff: 1 Page Ref: 72

Topic: Demand Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

9) If a demand curve shifts to the left, then

- A) demand has increased.  
C) demand has decreased.

- B) quantity demanded has increased.  
D) quantity demanded has decreased.

Answer: C

Diff: 1 Page Ref: 72

Topic: Demand Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

10) Holding everything else constant, an increase in the price of MP3 players will result in

- A) a decrease in the quantity of MP3 players supplied.  
B) a decrease in the demand for MP3 players.  
C) an increase in the supply of MP3 players.  
D) a decrease in the quantity of MP3 players demanded.

Answer: D

Diff: 2 Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

11) A change in all of the following variables will change the market demand for a product *except*

- A) the price of the product.  
B) population and demographics.  
C) income.  
D) tastes.

Answer: A

Diff: 1 Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Table 3-1

Loose Leaf Tea Price per lb. (dollars)	Sunil's Quantity Demanded (lbs)	Mia's Quantity Demanded (lbs)	Rest of Market Quantity Demanded (lbs)	Market Quantity Demanded (lbs)
\$8	4	0	30	
6	7	2	40	
5	9	3	51	
4	12	5	64	
3	15	8	90	



- 12) **Refer to Table 3–1.** The table above shows the demand schedules for loose–leaf tea of two individuals (Sunil and Mia) and the rest of the market. At a price of \$5, the quantity demanded in the market would be

A) 51 lbs.                      B) 63 lbs.                      C) 76 lbs                      D) 146 lbs.

Answer: B

Diff: 2      Page Ref: 71

Topic: Demand Schedules

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 13) **Refer to Table 3–1.** The table above shows the demand schedules for loose–leaf tea of two individuals (Sunil and Mia) and the rest of the market. If the price of loose–leaf tea rises from \$3 to \$4, the market quantity demanded would

A) decrease by 32 lbs.                      B) increase by 64 lbs.  
C) increase by 32 lbs.                      D) decrease by 64 lbs.

Answer: A

Diff: 2      Page Ref: 71

Topic: Demand Schedules

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 14) The income effect of a price change refers to the impact of a change in

A) income on the price of a good.  
B) demand when income changes.  
C) the quantity demanded when income changes.  
D) the price of a good on a consumer's purchasing power.

Answer: D

Diff: 3      Page Ref: 71

Topic: Income Effect

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 15) Which of the following will shift the demand curve for a good?

A) a change in the technology used to produce the good  
B) an increase in the price of the good  
C) a decrease in the price of a complementary good  
D) a decrease in the price of the good

Answer: C

Diff: 1      Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) A movement along the demand curve for toothpaste would be caused by
- A) a change in the price of toothbrushes.
  - B) a change in consumer income.
  - C) a change in the price of toothpaste.
  - D) a change in population.

Answer: C

Diff: 1 Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 17) When the price of a good falls, consumers buy a larger quantity because of the \_\_\_\_\_ effect and the \_\_\_\_\_ effect.
- A) substitution; income
  - B) normal; inferior
  - C) substitute; complement;
  - D) supply; demand

Answer: A

Diff: 1 Page Ref: 71

Topic: Substitution Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 18) If the price of grapefruit rises, the substitution effect due to the price change will cause
- A) a decrease in the demand for grapefruit.
  - B) a decrease in the demand for oranges, a substitute for grapefruit.
  - C) a decrease in the quantity demanded of grapefruit.
  - D) a decrease in the quantity supplied of grapefruit.

Answer: C

Diff: 3 Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) If the price of orchids falls, the substitution effect due to the price change will cause
- A) an increase in the demand for orchids.
  - B) an increase in the demand for roses, a substitute for orchids.
  - C) an increase in the quantity demanded of orchids.
  - D) an increase in the quantity supplied of orchids.

Answer: C

Diff: 3 Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 20) The \_\_\_\_\_ effect refers to the change in quantity demanded for a good that results from the effect of a change in the good's price on consumer's purchasing power.
- A) *ceteris paribus*
  - B) population
  - C) substitution
  - D) income

Answer: D

Diff: 2 Page Ref: 71

Topic: Ceteris Paribus Condition

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 21) If an increase in income leads to an increase in the demand for peanut butter, then peanut butter is

A) a neutral good. B) a normal good.  
C) a necessity. D) a complement.

Answer: B

Diff: 1 Page Ref: 73

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 22) If an increase in income leads to a decrease in the demand for popcorn, then popcorn is

A) an inferior good. B) a neutral good.  
C) a necessity. D) a normal good.

Answer: A

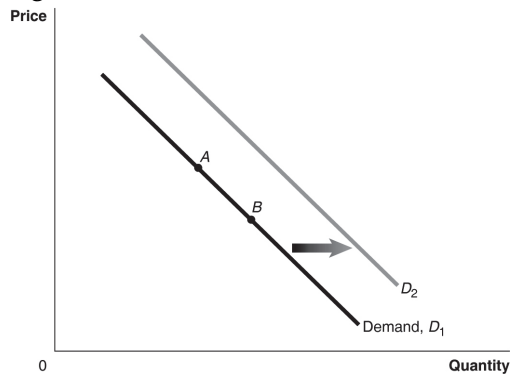
Diff: 2 Page Ref: 73

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-1



- 23) Refer to Figure 3-1. An increase in population would be represented by a movement from  
A) A to B. B) B to A. C)  $D_1$  to  $D_2$ . D)  $D_2$  to  $D_1$ .

Answer: C

Diff: 2 Page Ref: 74

Topic: Population and Demographics

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 24) Refer to Figure 3-1. A decrease in taste or preference would be represented by a movement from  
A) A to B. B) B to A. C)  $D_1$  to  $D_2$ . D)  $D_2$  to  $D_1$ .

Answer: D

Diff: 2 Page Ref: 74

Topic: Tastes

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 25) **Refer to Figure 3–1.** If the product represented is an inferior good, an increase in income would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: D

Diff: 2      Page Ref: 73

Topic: Income

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 26) **Refer to Figure 3–1.** A decrease in the price of the product would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: A

Diff: 2      Page Ref: 75

Topic: Quantity Demanded

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 27) **Refer to Figure 3–1.** A decrease in the price of a substitute good would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: D

Diff: 2      Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 28) **Refer to Figure 3–1.** A decrease in the price of a complementary good would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: C

Diff: 2      Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 29) **Refer to Figure 3–1.** An increase in the expected future price of the product would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: C

Diff: 2      Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 30) **Refer to Figure 3-1.** If the product represented is a normal good, a decrease in income would be represented by a movement from
- A) A to B.                      B) B to A.                      C)  $D_1$  to  $D_2$ .                      D)  $D_2$  to  $D_1$ .

Answer: D

Diff: 2      Page Ref: 72

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 31) The Internet has created a new category in the book selling market, namely, the "barely used" book. How does the availability of barely used books affect the market for new books?
- A) The demand curve for new books shifts to the right.  
 B) The demand curve for new books shifts to the left.  
 C) The supply curve for new books shifts to the right.  
 D) The supply curve for new books shifts to the left.

Answer: B

Diff: 2      Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 32) Elvira decreased her consumption of bananas when the price of peanut butter increased. For Elvira, peanut butter and bananas are
- A) substitutes in consumption.                      B) both inferior goods.  
 C) complements in consumption.                      D) both luxury goods.

Answer: C

Diff: 3      Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 33) Tomas increased his consumption of potato chips when the price of pistachios increased. For Tomas, potato chips and pistachios are
- A) substitutes in consumption.                      B) both inferior goods.  
 C) complements in consumption.                      D) both luxury goods.

Answer: A

Diff: 3      Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 34) If the price of automobiles was to increase, then
- A) the demand for gasoline would decrease.
  - B) the demand for gasoline would increase.
  - C) the supply of gasoline would increase.
  - D) the quantity demanded of gasoline would decrease.

Answer: A

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 35) If the price of music downloads was to decrease, then
- A) the demand for MP3 players would decrease.
  - B) the demand for MP3 players would increase.
  - C) the supply of MP3 players would increase.
  - D) the quantity demanded of MP3 players would decrease.

Answer: B

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 36) Suppose that when the price of raspberries increases, Lonnie increases his purchases of papayas. To Lonnie,
- A) raspberries and papayas are complements.
  - B) raspberries and papayas are inferior goods.
  - C) raspberries and papayas are normal goods.
  - D) raspberries and papayas are substitutes.

Answer: D

Diff: 2 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 37) Suppose that when the price of hamburgers decreases, the Ruiz family increases their purchases of ketchup. To the Ruiz family,
- A) hamburgers and ketchup are complements.
  - B) hamburgers and ketchup are substitutes.
  - C) hamburgers and ketchup are normal goods.
  - D) hamburgers are normal goods and hot dogs are inferior goods.

Answer: A

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 38) Studies have shown links between calcium consumption and a reduction in osteoporosis. How does this affect the market for calcium?
- A) The calcium supply curve shifts to the right because of a change in tastes in favor of calcium.
  - B) The calcium demand curve shifts to the right because of a change in tastes in favor of calcium.
  - C) The calcium demand curve shifts to the left because this new information will increase the price of calcium.
  - D) The calcium supply curve shifts to the left because this new information will increase the price of calcium.

Answer: B

Diff: 2 Page Ref: 74

Topic: Tastes

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 39) Technological advances have resulted in lower prices for digital cameras. What is the impact of this on the market for traditional (non-digital) cameras?
- A) The demand curve for traditional cameras shifts to the right.
  - B) The supply curve for traditional cameras shifts to the right.
  - C) The demand curve for traditional cameras shifts to the left.
  - D) The supply curve for traditional cameras shifts to the left.

Answer: C

Diff: 2 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 40) How does the increasing use of MP3 players affect the market for compact discs?
- A) The demand curve for compact discs shifts to the right.
  - B) The supply curve for compact discs shifts to the left.
  - C) The supply curve for compact discs shifts to the right.
  - D) The demand curve for compact discs shifts to the left.

Answer: D

Diff: 2 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 41) Technological advancements have led to lower prices and an increase in the sale of digital cameras. How does this affect the digital photo printing paper market?
- A) The demand curve for digital photo printing paper shifts to the right.
  - B) The demand curve for digital photo printing paper shifts to the left.
  - C) The supply curve for digital photo printing paper shifts to the right.
  - D) The supply curve for digital photo printing paper shifts to the left.

Answer: A

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 42) Buyers rush to purchase stocks in California vineyards following a forecast of a 30 percent decline in this year's grape harvest. What happens in the California wine market as a result of this announcement?
- A) The demand curve for California wine shifts to the left in anticipation of higher prices in the future.
  - B) The demand curve for California wine shifts to the right in anticipation of higher prices in the future.
  - C) The supply curve for California wine shifts to the right in anticipation of higher prices in the future.
  - D) The supply curve for California wine shifts to the left in anticipation of lower quantities in the future.

Answer: B

Diff: 2 Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 43) Tom Searchinger, a senior attorney at the Environmental Defense Fund, observed that generous farm subsidies have encouraged farmers to produce more corn and more wheat. How does this affect the market for fertilizer?
- A) The supply of fertilizer increases.
  - B) The supply of fertilizer decreases
  - C) The demand for fertilizer increases.
  - D) The demand for fertilizer decreases.

Answer: C

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 44) In June, buyers of titanium expect that the price of titanium will fall in July. What happens in the titanium market in June, holding everything else constant?
- A) The demand curve shifts to the right.
  - B) The quantity demanded increases.
  - C) The quantity demanded decreases
  - D) The demand curve shifts to the left.

Answer: D

Diff: 2 Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 45) In January, buyers of gold expect that the price of gold will rise in February. What happens in the gold market in January, holding all else constant?
- A) The supply curve shifts to the right.
  - B) The demand curve shifts to the left.
  - C) The demand curve shifts to the right.
  - D) The quantity demanded increases.

Answer: C

Diff: 2 Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 46) If tablet computers are considered substitutes for e-readers, the decline in the price of tablet computers would, all else equal
- A) increase the demand for e-readers.
  - B) decrease the demand for e-readers.
  - C) increase the quantity demanded for e-readers.
  - D) decrease the quantity demanded for e-readers.

Answer: B

Diff: 2 Page Ref: 73

Topic: Income

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 47) Which of the following has occurred as the baby-boom generation ages?
- A) The demand for soft drinks has increased in the U.S. market.
  - B) The demand for soft drinks has decreased in the U.S. market.
  - C) The global demand for soft drinks has decreased.
  - D) The global demand for soft drinks has remained relatively low.

Answer: B

Diff: 1 Page Ref: 74–75

Topic: Population and Demographics

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 48) In the United States, consumption per-person of carbonated soft drinks \_\_\_\_\_ between 2005 and 2013.
- A) declined by more than 15 percent
  - B) increased by approximately 22 percent
  - C) fell by almost 80 percent
  - D) remained virtually unchanged

Answer: A

Diff: 1 Page Ref: 74–75

Topic: Population and Demographics

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 49) When deciding on which new products to develop, a firm must devote people, time, and money to designing a new product. Because any firm has only limited resources, it
- A) should wait until its competitors develop a similar product before deciding on devoting resources to its own product development.
  - B) is not able to develop more than one new product at a time.
  - C) must be certain that the product it chooses to develop will be successful or it will not be able to stay in business.
  - D) faces a trade-off, because resources used to develop one product will not be available to develop another product.

Answer: D

Diff: 1 Page Ref: 77–78

Topic: Tastes

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 50) A(n) \_\_\_\_\_ is represented by a leftward shift of the demand curve while a(n) \_\_\_\_\_ is represented by a movement along a given demand curve.
- A) decrease in demand; increase in demand
  - B) decrease in demand; increase in quantity demanded
  - C) increase in demand; decrease in quantity demanded
  - D) decrease in quantity demanded; decrease in demand

Answer: B

Diff: 1 Page Ref: 75

Topic: Demand versus Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 51) If, in response to a decrease in the price of grapes, the quantity of grapes demanded increases, economists would describe this as
- A) an increase in demand.
  - B) an increase in quantity demanded.
  - C) a change in consumer income.
  - D) an increase in consumers' taste for coffee.

Answer: B

Diff: 2 Page Ref: 70

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 52) The law of demand implies, holding everything else constant, that as the price of gelato
- A) increases, the demand for gelato will increase.
  - B) increases, the quantity of gelato demanded will increase.
  - C) decreases, the quantity of gelato demanded will increase.
  - D) decreases, the demand for gelato will increase.

Answer: C

Diff: 1 Page Ref: 71

Topic: Law of Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 53) The phrase "demand has decreased" means that
- A) a demand curve has shifted to the left.
  - B) there has been an upward movement along a demand curve.
  - C) there has been a downward movement along a demand curve.
  - D) a demand curve has shifted to the right.

Answer: A

Diff: 1 Page Ref: 72

Topic: Demand Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 54) Holding everything else constant, a decrease in the price of bicycles will result in
- A) a decrease in the quantity of bicycles demanded.
  - B) an increase in the demand for bicycles.
  - C) a decrease in the supply of bicycles.
  - D) an increase in the quantity of bicycles demanded.

Answer: D

Diff: 2 Page Ref: 76

Topic: Quantity Demanded

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 55) A change in which variable will change the market demand for a product?
- A) the price of the product
  - B) population
  - C) technology
  - D) the prices of substitutes in production

Answer: B

Diff: 1 Page Ref: 74

Topic: Population and Demographics

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Table 3-2

Caviar Price per oz. (dollars)	Ari's Quantity Demanded (oz.)	Sonia's Quantity Demanded (oz.)	Rest of Market Quantity Demanded (oz.)	Market Quantity Demanded (oz.)
\$75	6	0	46	
65	18	6	64	
55	28	14	136	
45	36	24	170	
35	44	36	220	

- 56) **Refer to Table 3-2.** The table above shows the demand schedules for caviar of two individuals (Ari and Sonia) and the rest of the market. At a price of \$55, the quantity demanded in the market would be

A) 42 oz.                      B) 136 oz.                      C) 178 oz.                      D) 233 oz.

Answer: C

Diff: 2 Page Ref: 70-71

Topic: Demand Schedules

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 57) **Refer to Table 3-2.** The table above shows the demand schedules for caviar of two individuals (Ari and Sonia) and the rest of the market. At a price of \$75, the quantity demanded in the market would be

A) 6 oz.                      B) 46 oz.                      C) 52 oz.                      D) 127 oz.

Answer: C

Diff: 2 Page Ref: 70-71

Topic: Demand Schedules

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 62) If the price of refillable butane lighters was to decrease, then
- A) the demand for butane would decrease.
  - B) the demand for butane would increase.
  - C) the quantity of butane demanded would increase.
  - D) the quantity of butane demanded would decrease.

Answer: B

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 63) Suppose that when the price of hamburgers decreases, the Landry family decreases their purchases of chicken nuggets. To the Landry family
- A) hamburgers and chicken nuggets are complements.
  - B) hamburgers and chicken nuggets are inferior goods.
  - C) hamburgers and chicken nuggets are normal goods.
  - D) hamburgers and chicken nuggets are substitutes.

Answer: D

Diff: 2 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 64) Suppose that when the price of strawberries decreases, Simone increases her purchase of whipped cream. To Simone
- A) strawberries and whipped cream are complements.
  - B) strawberries and whipped cream are substitutes.
  - C) strawberries and whipped cream are normal goods.
  - D) strawberries are a normal good and whipped cream is an inferior good.

Answer: A

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 65) If the price of gasoline decreases, what will be the impact in the market for public transportation?
- A) The demand curve for public transportation shifts to the right.
  - B) The quantity of public transportation demanded increases.
  - C) The demand curve for public transportation shifts to the left.
  - D) The quantity of public transportation demanded decreases.

Answer: C

Diff: 2 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

66) How does the decreasing use of traditional cameras affect the market for traditional camera film?

- A) The demand curve for traditional camera film shifts to the right.
- B) The quantity of traditional camera film demanded decreases.
- C) The quantity of traditional camera film demanded increases.
- D) The demand curve for traditional camera film shifts to the left.

Answer: D

Diff: 2 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

67) The income effect of a price change refers to the change in the quantity demanded of a good that results from a change in purchasing power as a result of the price change.

Answer: TRUE

Diff: 2 Page Ref: 71

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

68) Chips and salsa are complements. If the price of salsa decreases, the demand for chips will increase.

Answer: TRUE

Diff: 1 Page Ref: 74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

69) A normal good is a good for which the demanded increases as income decreases, holding everything else constant.

Answer: FALSE

Diff: 1 Page Ref: 72

Topic: Income

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

70) The income effect explains why there is an inverse relationship between the price of a product and the quantity of the product demanded.

Answer: TRUE

Diff: 1 Page Ref: 71

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

71) If consumers believe the price of iPads will decrease in the future, this will cause the demand for iPads to decrease now.

Answer: TRUE

Diff: 1 Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 72) The income effect of a price change refers to the change in the quantity demanded of a good that results from a change in the price of a complementary product.

Answer: FALSE

Diff: 2 Page Ref: 71

Topic: Income Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 73) If the price of peaches, a substitute for plums, decreases the demand for plums will increase.

Answer: FALSE

Diff: 1 Page Ref: 73

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 74) An inferior good is a good for which the quantity demanded decreases as the price increases, holding everything else constant.

Answer: FALSE

Diff: 1 Page Ref: 73

Topic: Income

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 75) The substitution effect explains why there is a direct relationship between the price of a product and the quantity of the product demanded.

Answer: FALSE

Diff: 1 Page Ref: 71

Topic: Substitution Effect

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 76) If consumers believe the price of LCD televisions will decrease in the future, this will cause the demand for LCD televisions to increase now.

Answer: FALSE

Diff: 1 Page Ref: 75

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 77) What is the *ceteris paribus* condition?

Answer: The *ceteris paribus* condition is the requirement that when analyzing the relationship between two variables, such as price and quantity demanded, other variables must be held constant.

Diff: 1 Page Ref: 72

Topic: Ceteris Paribus Condition

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

78) What are the two effects that explain the Law of Demand? Briefly explain each effect.

Answer: The two effects that explain the Law of Demand are the income effect and the substitution effect. The income effect is the change in quantity demanded of a good that results from a change in purchasing power due to a change in the good's price. The substitution effect is the change in quantity demanded of a good that results from the effect of a change in the good's price making the good more or less expensive relative to other goods that are substitutes.

Diff: 3 Page Ref: 71

Topic: Law of Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

79) Explain the difference between a normal good and an inferior good.

Answer: A normal good is something for which the demand increases when income rises and the demand decreases when income falls. An inferior good is something for which the demand decreases when income rises and the demand increases when income falls.

Diff: 2 Page Ref: 72–73

Topic: Income

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

80) For each of the following pairs of products state which are complements, which are substitutes, and which are unrelated.

- a. Digital camera and memory stick
- b. 7Up and Mountain Dew
- c. Swimsuits and flip-flops
- d. Tylenol and cat food
- e. Photocopier and paper

Answer: a. Complements  
 b. Substitutes  
 c. Complements  
 d. Unrelated  
 e. Complements

Diff: 1 Page Ref: 73–74

Topic: Price of Related Goods

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

81) What are the five variables that will shift the demand curve?

Answer: 1. Income  
 2. Price of related goods  
 3. Tastes  
 4. Population and demographics  
 5. Expected future prices

Diff: 2 Page Ref: 72

Topic: Demand Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 82) For each of the following pairs of products state which are complements, which are substitutes, and which are unrelated.
- Blu-ray discs and video-on-demand
  - Fiat 500 and Mini Cooper S
  - Toothpaste and toothbrush
  - Popcorn and snowboards
  - Razors and razor blades

Answer: a. Substitutes  
 b. Substitutes  
 c. Complements  
 d. Unrelated  
 e. Complements

Diff: 1 Page Ref: 73–74

Topic: Price of Related Goods

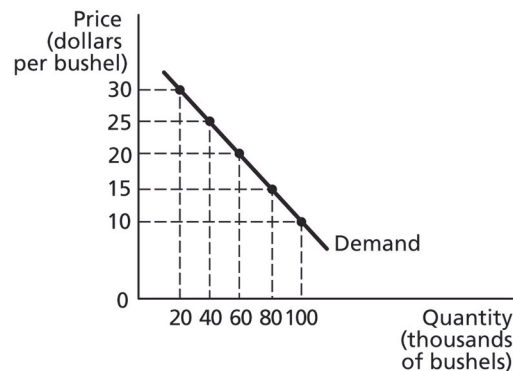
Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 83) Use the following demand schedule for apples to draw a graph of the demand curve. Be sure to label the demand curve and each axis, and show each point on the demand curve.

Price (dollars per bushel)	Quantity (thousands of bushels)
30	20
25	40
20	60
15	80
10	100

Answer:



Diff: 2 Page Ref: 70–71

Topic: Demand Schedules

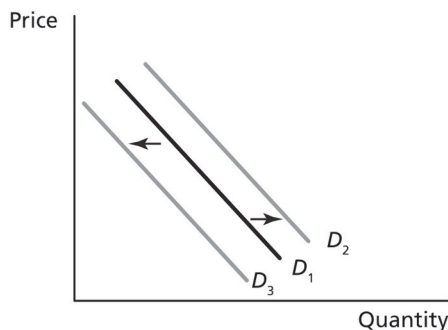
Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

84) Draw a demand curve and label it  $D_1$ . On the graph, illustrate an increase in demand and a decrease in demand, and label the curves  $D_2$  and  $D_3$ , respectively. Starting on demand curve  $D_1$ , explain the shift that would result from each of the following events:

- an increase in income and the good is a normal good
- an increase in income and the good is an inferior good
- a decrease in the price of a substitute good
- a decrease in the price of a complementary good
- an increase in the taste for the good
- a decrease in population
- an increase in the expected future price of the good

Answer:



a, d, e, and g would increase demand, causing a shift from  $D_1$  to  $D_2$

b, c, and f would decrease demand, causing a shift from  $D_1$  to  $D_3$

Diff: 2 Page Ref: 72–74

Topic: Demand Curves

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

### 3.2 The Supply Side of the Market

1) A supply schedule

- is a table that shows the relationship between the price of a product and the quantity of the product supplied.
- is a curve that shows the relationship between the price of a product and the quantity of the product supplied.
- is the relationship between the supply of a good and the cost of producing the good.
- is a table that shows the relationship between the price of a product and the quantity of the product that producers and consumers are willing to exchange.

Answer: A

Diff: 1 Page Ref: 78

Topic: Supply Schedules

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 2) If in the market for peaches, the supply curve has shifted to the left
- A) the supply of peaches has increased.
  - B) the supply of peaches has decreased.
  - C) the quantity of peaches supplied has increased.
  - D) the quantity of peaches supplied has decreased.

Answer: B

Diff: 1 Page Ref: 79

Topic: Supply Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 3) If, in the market for oranges, the supply has increased then
- A) the supply curve for oranges has shifted to the right.
  - B) the supply curve for oranges has shifted to the left.
  - C) there has been a movement upwards along the supply curve for oranges.
  - D) there has been a movement downwards along the supply curve for oranges.

Answer: A

Diff: 1 Page Ref: 79

Topic: Supply Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 4) Last year, the Pottery Palace supplied 8,000 ceramic pots at \$40 each. This year, the company supplied the same quantity of ceramic pots at \$55 each. Based on this evidence, The Pottery Palace has experienced
- A) a decrease in supply.
  - B) an increase in supply.
  - C) an increase in the quantity supplied.
  - D) a decrease in the quantity supplied.

Answer: A

Diff: 2 Page Ref: 78

Topic: Supply Schedules

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 5) What is the difference between an "increase in supply" and an "increase in quantity supplied"?
- A) There is no difference between the two terms; they both refer to a shift of the supply curve.
  - B) There is no difference between the two terms; they both refer to a movement along a given supply curve.
  - C) An "increase in supply" means the supply curve has shifted to the right while an "increase in quantity supplied" means at any given price supply has increased.
  - D) An "increase in supply" means the supply curve has shifted to the right while an "increase in quantity supplied" refers to a movement along a given supply curve in response to an increase in price.

Answer: D

Diff: 1 Page Ref: 81

Topic: Supply vs. Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) One would speak of a change in the quantity of a good supplied, rather than a change in supply, if

A) supplier expectations about future prices change.  
 B) the price of the good changes.  
 C) the cost of producing the good changes.  
 D) prices of substitutes in production change.

Answer: B

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 7) Which of the following would cause a decrease in the supply of milk?

A) an increase in the price of cookies (assuming that milk and cookies are complements)  
 B) a decrease in the price of milk  
 C) an increase the price of a product that producers sell instead of milk  
 D) an increase in the number of firms that produce milk

Answer: C

Diff: 2 Page Ref: 80

Topic: Prices of Substitutes in Production

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 8) In October, market analysts predict that the price of platinum will fall in November. What happens in the platinum market in October, holding everything else constant?

A) The supply curve shifts to the right.  
 B) The supply curve shifts to the left.  
 C) The quantity demanded and the quantity supplied of platinum increase.  
 D) The demand curve shifts to the right.

Answer: A

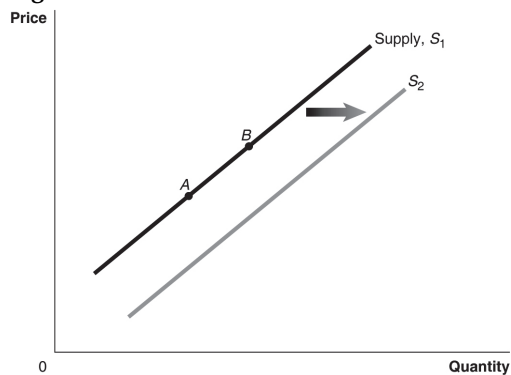
Diff: 2 Page Ref: 80

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

**Figure 3-2**



- 9) Refer to Figure 3-2. An increase in price of inputs would be represented by a movement from

A) A to B.                      B) B to A.                      C) S<sub>1</sub> to S<sub>2</sub>.                      D) S<sub>2</sub> to S<sub>1</sub>.

Answer: D

Diff: 2 Page Ref: 81

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 10) **Refer to Figure 3-2.** An increase in the number of firms in the market would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $S_1$  to  $S_2$ .                      D)  $S_2$  to  $S_1$ .

Answer: C

Diff: 2 Page Ref: 81

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 11) **Refer to Figure 3-2.** An increase in the price of substitutes in production would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $S_1$  to  $S_2$ .                      D)  $S_2$  to  $S_1$ .

Answer: D

Diff: 2 Page Ref: 81

Topic: Prices of Substitutes in Production

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 12) **Refer to Figure 3-2.** A decrease in the price of the product would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $S_1$  to  $S_2$ .                      D)  $S_2$  to  $S_1$ .

Answer: B

Diff: 2 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 13) **Refer to Figure 3-2.** A decrease in productivity would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $S_1$  to  $S_2$ .                      D)  $S_2$  to  $S_1$ .

Answer: D

Diff: 2 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 14) **Refer to Figure 3-2.** A decrease in the expected future price of the product would be represented by a movement from

A) A to B.                      B) B to A.                      C)  $S_1$  to  $S_2$ .                      D)  $S_2$  to  $S_1$ .

Answer: C

Diff: 2 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 15) In October 2005, the U.S. Fish and Wildlife Service banned the importation of beluga caviar, the most prized of caviars, from the Caspian Sea. What happened in the market for caviar in the U.S.?

A) The supply curve shifted to the left.                      B) The supply curve shifted to the right.  
C) The demand curve shifted to the right.                  D) The demand curve shifted to the left.

Answer: A

Diff: 2      Page Ref: 80

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) Danielle Ocean pays for monthly pool maintenance for her home swimming pool. Last week the owner of the pool service informed Danielle that he will have to raise his monthly service fee because of increases in the price of pool chemicals. How is the market for pool maintenance services affected by this?

A) There is an increase in the supply of pool maintenance services.  
B) There is a decrease in the demand for pool maintenance services.  
C) There is a decrease in the quantity of pool maintenance services supplied.  
D) There is a decrease in the supply of pool maintenance services.

Answer: D

Diff: 2      Page Ref: 80

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 17) Harvey Rabbitt pays for monthly cable TV service. Last week the cable company informed Harvey that his monthly cable price would go down because the city council has granted approval for three new cable companies to service his area. How is the market for cable TV services affected by this?

A) There is an increase in the supply of cable TV service.  
B) There is a decrease in the demand for cable TV service.  
C) There is a decrease in the quantity of cable TV service supplied.  
D) There is a decrease in the supply of cable TV service.

Answer: A

Diff: 2      Page Ref: 80

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 18) The popularity of digital cameras has enticed large discount stores like Wal-Mart and Costco to offer digital photo printing services. How does this affect the digital photo printing market?

A) The demand curve for digital photo printing services shifts to the right.  
B) The demand curve for digital photo printing services shifts to the left.  
C) The supply curve for digital photo printing services shifts to the right.  
D) The supply curve for digital photo printing services shifts to the left.

Answer: C

Diff: 2      Page Ref: 80

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) Ranchers can raise either cattle or sheep on their land. Which of the following would cause the supply of sheep to increase?

A) an increase in the price of sheep  
 B) a decrease in the price of cattle  
 C) an increase in the demand for cattle  
 D) an increase in the price of sheep feed

Answer: B

Diff: 2 Page Ref: 80

Topic: Prices of Substitutes in Production

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 20) Vineyards can grow either red wine grapes or white wine grapes on their land. Which of the following would cause the supply of red wine grapes to decrease?

A) an increase in the price of white wine grapes  
 B) a decrease in the price of white wine grapes  
 C) an increase in the demand for red wine grapes  
 D) an increase in the price of red wine

Answer: A

Diff: 2 Page Ref: 80

Topic: Prices of Substitutes in Production

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 21) Which of the following would shift the supply curve for MP3 players to the right?

A) an increase in the price of a substitute in production  
 B) an increase in consumer income (assuming that all MP3 players are normal goods)  
 C) a decrease in the number of firms that produce MP3 players  
 D) a decrease in the price of an input used to produce MP3 players

Answer: D

Diff: 3 Page Ref: 80

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 22) Which of the following would shift the supply curve for MP3 players to the left?

A) an increase in the price of an input used to produce MP3 players  
 B) a decrease in consumer tastes for MP3 players  
 C) an increase in the number of firms that produce MP3 players  
 D) an increase in the productivity of the workers who produce MP3 players

Answer: A

Diff: 3 Page Ref: 80

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 23) If a firm has an incentive to increase supply now and decrease supply in the future, the firm expects that the

A) price of its product will be lower in the future than it is today.  
 B) price of its product will be higher in the future than it is today.  
 C) price of inputs will be lower in the future than they are today.  
 D) demand for the product will be lower in the future than it is today.

Answer: A

Diff: 3 Page Ref: 80

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 24) If a firm expects that the price of its product will be higher in the future than it is today
- A) the firm will go out of business.
  - B) the firm has an incentive to increase supply now and decrease supply in the future.
  - C) the firm has an incentive to decrease quantity supplied now and increase quantity supplied in the future.
  - D) the firm has an incentive to decrease supply now and increase supply in the future.

Answer: D

Diff: 2 Page Ref: 80

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 25) The supply curve for watches
- A) shows the supply of watches consumers are willing and able to buy at any given price.
  - B) is downward sloping.
  - C) shows the relationship between the quantity of watches firms are willing and able to supply and the quantity of watches consumers are willing and able to purchase.
  - D) shows the relationship between the price of watches and the quantity of watches supplied.

Answer: D

Diff: 2 Page Ref: 78

Topic: Supply Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 26) A decrease in the price of GPS systems will result in
- A) a smaller quantity of GPS systems supplied.
  - B) a larger quantity of GPS systems supplied.
  - C) a decrease in the demand for GPS systems.
  - D) an increase in the supply of GPS systems.

Answer: A

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 27) An increase in the price of off-road vehicles will result in
- A) a smaller quantity of off-road vehicles supplied.
  - B) a larger quantity of off-road vehicles supplied.
  - C) an increase in the demand for off-road vehicles.
  - D) a decrease in the supply of off-road vehicles.

Answer: B

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 28) Which of the following would cause an increase in the supply of peanut butter?
- A) a decrease in the price of grape jelly (assuming that peanut butter and grape jelly are complements)
  - B) an increase in the price of peanut butter
  - C) an increase the price of a product that producers sell instead of peanut butter
  - D) an increase in the number of firms that produce peanut butter

Answer: D

Diff: 2 Page Ref: 80

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 29) In February, market analysts predict that the price of titanium will rise in March. What happens in the titanium market in February, holding everything else constant?
- A) The supply curve shifts to the right.
  - B) The supply curve shifts to the left.
  - C) The quantity demanded and the quantity supplied of titanium increase.
  - D) The demand curve shifts to the left.

Answer: B

Diff: 2 Page Ref: 80

Topic: Expected Future Prices

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 30) If the United States placed an embargo on Swedish products, what would happen in the U.S. market for Swedish furniture?
- A) The supply curve would shift to the left.
  - B) The supply curve would shift to the right.
  - C) The demand curve would shift to the right.
  - D) The demand curve would shift to the left.

Answer: A

Diff: 2 Page Ref: 80

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 31) An increase in the price of pineapples will result in
- A) a smaller quantity of pineapples supplied.
  - B) a larger quantity of pineapples supplied.
  - C) a decrease in the demand for pineapples.
  - D) an increase in the supply of pineapples.

Answer: B

Diff: 1 Page Ref: 79

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 32) An increase in the number of firms in a market will cause the quantity of a good supplied to increase.

Answer: FALSE

Diff: 1 Page Ref: 80

Topic: Number of Firms in the Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 33) A change in supply is represented by a shift of the supply curve.

Answer: TRUE

Diff: 1 Page Ref: 79

Topic: Supply Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 34) An increase in the quantity of a product supplied is caused by an increase in the price of the product.

Answer: TRUE

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 35) Quantity supplied refers to the amount of a good or service that a firm is willing and able to supply at a given price.

Answer: TRUE

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 36) A positive technological change will cause the supply of a good to increase.

Answer: TRUE

Diff: 1 Page Ref: 80

Topic: Technological Change

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 37) An decrease in quantity supplied is represented by a leftward shift of the supply curve.

Answer: FALSE

Diff: 1 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 38) An increase in the price of inputs will cause the supply curve for a product to shift to the right.

Answer: FALSE

Diff: 1 Page Ref: 80

Topic: Prices of Inputs

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 39) All else equal, as the price of a product falls, the quantity supplied increases.

Answer: FALSE

Diff: 1 Page Ref: 79

Topic: Law of Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 40) Explain the differences between a change in supply and a change in quantity supplied.

Answer: A change in supply refers to a shift of the supply curve, which occurs when one of the variables other than the price of the product changes. A change in quantity supplied refers to a movement along the supply curve, which occurs when the price of the product changes.

Diff: 1 Page Ref: 81

Topic: Supply Curves

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 41) What is the difference between a supply schedule and a supply curve?

Answer: A supply schedule is a *table* that shows the relationship between the price of a product and the quantity of the product supplied. A supply curve is a *curve* that shows the relationship between the price of a product and the quantity of the product supplied.

Diff: 2 Page Ref: 78

Topic: Supply Schedules

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 42) What is the law of supply? What does this law imply about the shape of the supply curve?

Answer: The law of supply states that, holding everything else constant, an increase in price causes an increase in quantity supplied. The positive relationship between price and quantity supplied gives rise to an upward-sloping supply curve.

Diff: 1 Page Ref: 79

Topic: Law of Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 43) From a supply perspective, what impact would an increase in the price of motorcycles have on the market for motorcycles?

Answer: An increase in the price of motorcycles would generate an increase in the quantity of motorcycles supplied in the market.

Diff: 2 Page Ref: 81

Topic: Quantity Supplied

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 44) Indicate whether each of the following situations would shift the supply curve to the left, to the right, or not at all.

- An increase in the number of firms in the market
- An increase in the current price of the product
- A decrease in productivity
- An increase in the expected future price of a product
- A decrease in the price of an input

- Answer: a. Shift to the right  
 b. No shift  
 c. Shift to the left  
 d. Shift to the left  
 e. Shift to the right

Diff: 2 Page Ref: 80

Topic: Shifts in Supply

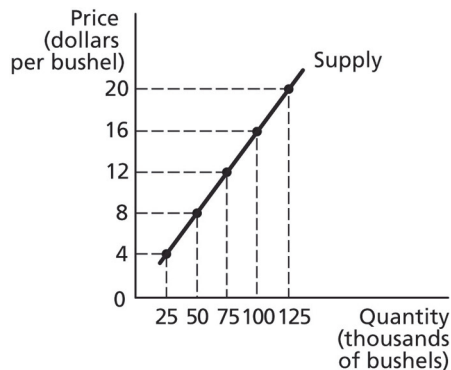
Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 45) Use the following supply schedule for cherries to draw a graph of the supply curve. Be sure to label the supply curve and each axis, and show each point on the supply curve.

Price (dollars per bushel)	Quantity (thousands of bushels)
4	25
8	50
12	75
16	100
20	125

Answer:



Diff: 2 Page Ref: 79

Topic: Supply Schedules

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

### 3.3 Market Equilibrium: Putting Demand and Supply Together

1) Which of the following is the correct way to describe equilibrium in a market?

- A) At equilibrium, demand equals supply.
- B) At equilibrium, quantity demanded equals quantity supplied.
- C) At equilibrium, market forces no longer apply.
- D) At equilibrium, scarcity is eliminated.

Answer: B

Diff: 1 Page Ref: 82

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

2) At a product's equilibrium price

- A) the product's demand curve is the same as the product's supply curve.
- B) the quantity of the product demanded is greater than the quantity of the product supplied.
- C) the quantity of the product demanded is less than the quantity of the product supplied.
- D) the product's demand curve crosses the product's supply curve.

Answer: D

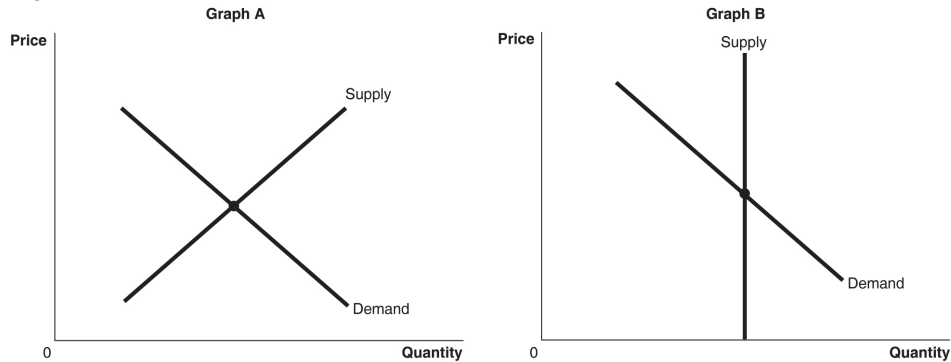
Diff: 1 Page Ref: 82

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

**Figure 3-3**



3) **Refer to Figure 3-3.** The figure above shows the supply and demand curves for two markets: the market for original Picasso paintings and the market for designer jeans. Which graph most likely represents which market?

- A) Graph B represents the market for original Picasso paintings and Graph A represents the market for designer jeans.
- B) Graph A represents the market for original Picasso paintings and Graph B represents the market for designer jeans.
- C) Graph A represents both the market for original Picasso paintings and designer jeans.
- D) Graph B represents both the market for original Picasso paintings and designer jeans.

Answer: A

Diff: 2 Page Ref: 82

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 4) In 2004, hurricanes damaged a large portion of Florida's orange crop. As a result of this, many orange growers were not able to supply fruit to the market. At the pre-hurricane equilibrium price (i.e., at the initial equilibrium price), we would expect to see
- A) a surplus of oranges.
  - B) the quantity demanded equal to the quantity supplied.
  - C) a shortage of oranges.
  - D) an increase in the demand for oranges.

Answer: C

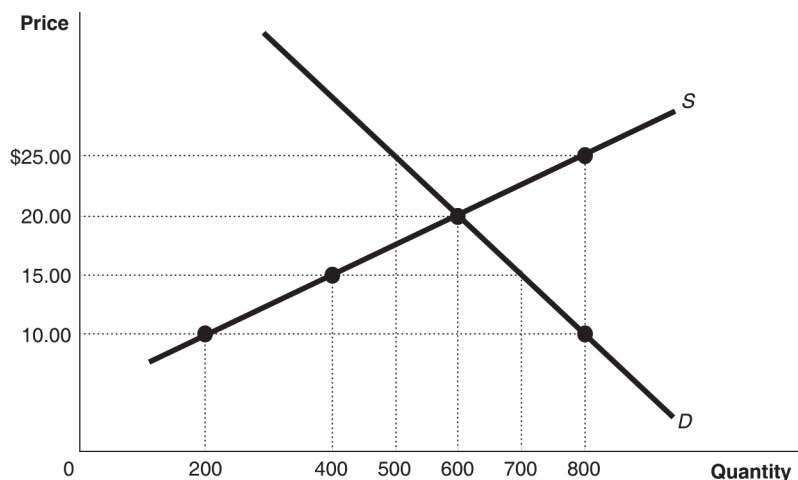
Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-4



- 5) Refer to Figure 3-4. If the price is \$10,
- A) there would be a surplus of 600 units.
  - B) there would be a shortage of 600 units.
  - C) there would be a surplus of 200 units.
  - D) there would be a shortage of 200 units.

Answer: B

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) Refer to Figure 3-4. At a price of \$10, how many units will be sold?
- A) 200
  - B) 400
  - C) 600
  - D) 800

Answer: A

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 7) **Refer to Figure 3-4.** If the current market price is \$10, the market will achieve equilibrium by
- A) a price increase, increasing the supply and decreasing the demand.
  - B) a price decrease, decreasing the supply and increasing the demand.
  - C) a price decrease, decreasing the quantity supplied and increasing the quantity demanded.
  - D) a price increase, increasing the quantity supplied and decreasing the quantity demanded.

Answer: D

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 8) **Refer to Figure 3-4.** If the price is \$15,
- A) there would be a surplus of 300 units.
  - B) there would be a shortage of 300 units.
  - C) there would be a surplus of 400 units.
  - D) there would be a shortage of 400 units.

Answer: B

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 9) **Refer to Figure 3-4.** At a price of \$15, how many units will be sold?
- A) 300
  - B) 400
  - C) 600
  - D) 700

Answer: B

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 10) **Refer to Figure 3-4.** If the current market price is \$15, the market will achieve equilibrium by
- A) a price increase, increasing the supply and decreasing the demand.
  - B) a price decrease, decreasing the supply and increasing the demand.
  - C) a price decrease, decreasing the quantity supplied and increasing the quantity demanded.
  - D) a price increase, increasing the quantity supplied and decreasing the quantity demanded.

Answer: D

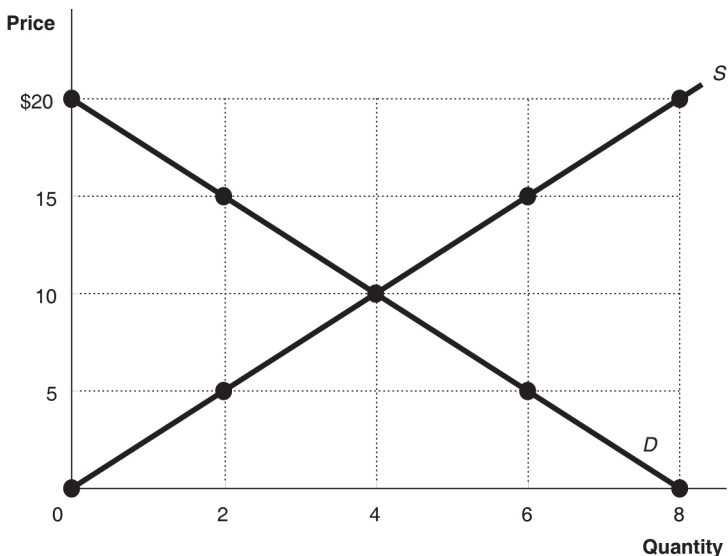
Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-5



11) Refer to Figure 3-5. At a price of \$15

- A) there would be a surplus of 4 units.  
C) there would be a surplus of 6 units.

- B) there would be a shortage of 2 units.  
D) there would be a shortage of 4 units.

Answer: A

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

12) Refer to Figure 3-5. At a price of \$5, the quantity sold

- A) is 2 units.  
C) is 6 units.

- B) is 4 units.  
D) cannot be determined.

Answer: A

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

13) Refer to Figure 3-5. At a price of \$20

- A) there would be a surplus of 8 units.  
C) there would be a surplus of 0 units.

- B) there would be a shortage of 8 units.  
D) there would be a shortage of 4 units.

Answer: A

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 14) **Refer to Figure 3-5.** At a price of \$10, the quantity sold  
 A) is 2 units. B) is 4 units. C) is 6 units. D) is 8 units.

Answer: B

Diff: 2 Page Ref: 83

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 15) **Refer to Figure 3-5.** In a free market such as that depicted above, a surplus is eliminated by  
 A) a price increase, increasing the supply and decreasing the demand.  
 B) a price decrease, decreasing the supply and increasing the demand.  
 C) a price decrease, decreasing the quantity supplied and increasing the quantity demanded.  
 D) a price increase, increasing the quantity supplied and decreasing the quantity demanded.

Answer: C

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) Assume there is a shortage in the market for digital music players. Which of the following statements correctly describes this situation?  
 A) The demand for digital music players is greater than the supply of digital music players.  
 B) Some consumers will be unable to obtain digital music players at the market price and will have an incentive to offer to buy the product at a higher price.  
 C) The price of digital music players will rise in response to the shortage; as the price rises the quantity demanded will increase and the quantity supplied will decrease.  
 D) the shortage will cause an increase in the equilibrium price of digital music players.

Answer: B

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 17) In a perfectly competitive market, there are \_\_\_\_\_ buyers and \_\_\_\_\_ sellers.  
 A) many; few B) few; many C) many; many D) few; few

Answer: C

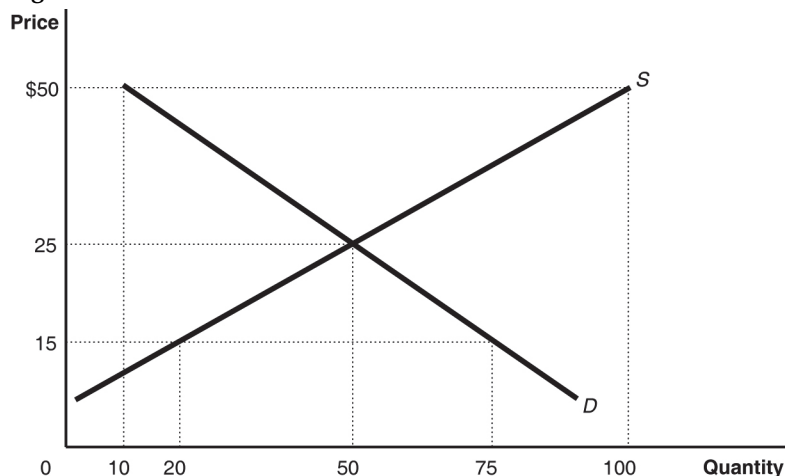
Diff: 1 Page Ref: 82

Topic: Perfectly Competitive Market

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-6



- 18) Refer to Figure 3-6. The figure above represents the market for canvas tote bags. Assume that the market price is \$35. Which of the following statements is *true*?
- A) There is a surplus that will cause the price to decrease; quantity demanded will then increase and quantity supplied will decrease until the price equals \$25.
  - B) There is a surplus that will cause the price to decrease; quantity supplied will then increase and quantity demanded will decrease until the price equals \$25.
  - C) There will be a surplus that will cause the price to decrease; demand will then increase and supply will decrease until the price equals \$25.
  - D) There is a surplus that will cause the price to increase; quantity demanded will then decrease and quantity supplied will increase until the price equals \$25.

Answer: A

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) Refer to Figure 3-6. The figure above represents the market for canvas tote bags. Assume that the price of tote bags is \$15. At this price
- A) the quantity demanded exceeds the quantity supplied of tote bags by 75. The price will eventually rise to \$25 where quantity demanded will equal quantity supplied.
  - B) the demand exceeds the supply of tote bags by 55. Some consumers will have an incentive to offer to buy tote bags at a higher price.
  - C) there is a shortage, equal to 55 tote bags, that will be eliminated when the price rises to \$25.
  - D) there is a shortage equal to 55 tote bags; the price of tote bags will rise until demand is equal to supply.

Answer: C

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 20) *Refer to Figure 3-6.* The figure above represents the market for canvas tote bags. Compare the conditions in the market when the price is \$50 and when the price is \$35. Which of the following describes how the market differs at these prices?
- A) At each price there is a surplus; the surplus is greater at \$35 than at \$50.
  - B) The difference between quantity supplied and quantity demanded is greater at \$50 than at \$35.
  - C) At each price there is a surplus; firms will lower the equilibrium price in order to eliminate the surplus.
  - D) At each price the supply of tote bags exceeds that demand for tote bags.

Answer: B

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 21) If, for a product, the quantity supplied exceeds the quantity demanded, the market price will fall until
- A) the quantity demanded exceeds the quantity supplied. The market will then be in equilibrium.
  - B) quantity demanded equals quantity supplied. The equilibrium price will then be lower than the market price.
  - C) all consumers will be able to afford the product.
  - D) quantity demanded equals quantity supplied. The market price will then equal the equilibrium price.

Answer: D

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 22) Which of the following is evidence of a surplus of bananas?
- A) Firms raise the price of bananas.
  - B) The price of bananas is lowered in order to increase sales.
  - C) The equilibrium price of bananas rises due to an increase in demand.
  - D) The quantity demanded of bananas is greater than the quantity supplied.

Answer: B

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

23) Which of the following is evidence of a shortage of walnuts?

- A) Firms lower the price of walnuts.
- B) The price of cashews is lowered in order to make up for the walnut shortage.
- C) The equilibrium price of walnuts falls due to a decrease in demand.
- D) The quantity demanded of walnuts is greater than the quantity supplied.

Answer: D

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

24) Auctions in recent years have resulted in higher prices paid for letters written by John Wilkes Booth than those written by Abraham Lincoln. Which of the following events would cause the price differences in these letters to get smaller?

- A) The demand for Booth letters decreases.
- B) The supply of Lincoln letters increases.
- C) The demand for Lincoln letters increases and the supply of Booth letters increases.
- D) The demand for Lincoln letters decreases and the demand for Booth letters increases.

Answer: C

Diff: 1 Page Ref: 84–85

Topic: Law of Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

25) Auctions in recent years have resulted in higher prices paid for letters written by John Wilkes Booth than those written by Abraham Lincoln. What is a reason for this difference in price?

- A) There is a surplus of letters written by Booth and a shortage of letters written by Lincoln.
- B) Many people are more fascinated by villains and anti-heroes than by heroic figures.
- C) There are more letters available for collectors to buy that were written by Lincoln than there are letters that were written by Booth.
- D) Booth was a well-known actor; the demand for his letters rose as wealthy actors attempted to buy them.

Answer: C

Diff: 1 Page Ref: 84–85

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

26) In response to a surplus the market price of a good will fall; as the price falls, the quantity demanded will increase and quantity supplied will decrease until equilibrium is reached.

Answer: TRUE

Diff: 2 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 27) Scarcity is defined as the situation that exists when the quantity demanded for a good is greater than the quantity supplied.

Answer: FALSE

Diff: 1 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 28) Market equilibrium occurs where supply equals demand.

Answer: FALSE

Diff: 1 Page Ref: 82

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 29) A shortage occurs when the market price is lower than the equilibrium price.

Answer: TRUE

Diff: 1 Page Ref: 82

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 30) A shortage is defined as the situation that exists when the quantity of a good supplied is greater than the quantity demanded.

Answer: FALSE

Diff: 1 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 31) A surplus occurs when the actual selling price is above the market equilibrium price.

Answer: TRUE

Diff: 1 Page Ref: 83

Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 32) Nearly a quarter of China's 1.3 billion people are under the age of 15. How will this affect high school enrollment over the next fifteen years? The labor market over the next fifteen years?

Answer: The demand for high school education will increase. The supply of labor over the next 15 years will increase.

Diff: 1 Page Ref: 83

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 33) In 2004, hurricanes destroyed a large portion of Florida's grapefruit crop. How did this affect the market price and market quantity of grapefruit?

Answer: The supply curve for grapefruit shifted to the left resulting in a higher equilibrium price and lower equilibrium quantity.

Diff: 2 Page Ref: 83

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 34) If the price of a product is above equilibrium, what forces it down?

Answer: When the price is above equilibrium, a surplus occurs. Some producers who are unable to sell the product will have an incentive to offer to sell the product at a lower price. A lower price will simultaneously decrease the quantity supplied and increase the quantity demanded. This downward pressure on price continues until the surplus is eliminated and equilibrium is achieved.

Diff: 2 Page Ref: 83

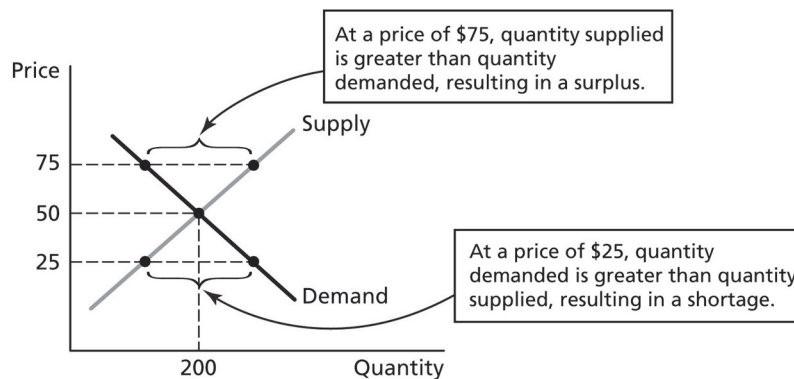
Topic: Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 35) Draw a supply and demand graph showing an equilibrium price of \$50 and an equilibrium quantity of 200 units. Explain what would happen if the selling price was \$75, and illustrate this on the graph. Explain what would happen if the selling price was \$25, and illustrate this on the graph. Be sure to label each axis and curve on the graph.

Answer:



Diff: 2 Page Ref: 83

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Table 3-3

Price per Bushel	Quantity Demanded (bushels)	Quantity Supplied (bushels)
\$3	30,000	0
6	26,000	4,000
9	22,000	9,000
12	18,000	12,000
15	15,000	15,000
18	12,000	22,000
21	8,000	28,000
24	4,000	36,000

- 36) *Refer to Table 3-3.* The table contains information about the corn market. Use the table to answer the following questions.
- What are the equilibrium price and quantity of corn?
  - Suppose the prevailing price is \$9 per bushel. Is there a shortage or a surplus in the market?
  - What is the quantity of the shortage or surplus?
  - How many bushels will be sold if the market price is \$9 per bushel?
  - If the market price is \$9 per bushel, what must happen to restore equilibrium in the market?
  - At what price will suppliers be able to sell 22,000 bushels of corn?
  - Suppose the market price is \$21 per bushel. Is there a shortage or a surplus in the market?
  - What is the quantity of the shortage or surplus?
  - How many bushels will be sold if the market price is \$21 per bushel?
  - If the market price is \$21 per bushel, what must happen to restore equilibrium in the market?

- Answer:
- Equilibrium price = \$15; Equilibrium quantity = 15,000 bushels.
  - There is a shortage.
  - Shortage = 22,000 - 9,000 = 13,000 bushels.
  - Quantity sold = 9,000 bushels.
  - Price must rise.
  - At \$9 per bushel.
  - There is a surplus.
  - Surplus = 28,000 - 8,000 = 20,000 bushels.
  - Quantity sold = 8,000 bushels.
  - Price must fall.

Diff: 2 Page Ref: 82-83

Topic: Market Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

### 3.4 The Effect of Demand and Supply Shifts on Equilibrium

- 1) Let  $D$  = demand,  $S$  = supply,  $P$  = equilibrium price,  $Q$  = equilibrium quantity. What happens in the market for tropical hardwood trees if the governments restrict the amount of forest lands that can be logged?

- A)  $D$  decreases,  $S$  no change,  $P$  and  $Q$  decrease
- B)  $S$  decreases,  $D$  no change,  $P$  increases,  $Q$  decreases
- C)  $D$  and  $S$  decrease,  $P$  and  $Q$  increase
- D)  $D$  no change,  $S$  decreases,  $P$  increases,  $Q$  increases

Answer: B

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 2) Let  $D$  = demand,  $S$  = supply,  $P$  = equilibrium price,  $Q$  = equilibrium quantity. What happens in the market for walnuts if the Centers for Disease Control and Prevention announces that consuming a half cup of walnuts each week helps to lower bad levels of cholesterol?

- A)  $D$  increases,  $S$  no change,  $P$  and  $Q$  increase
- B)  $S$  increases,  $D$  no change,  $P$  decreases,  $Q$  increases
- C)  $D$  and  $S$  increase,  $P$  and  $Q$  decrease
- D)  $D$  no change,  $S$  increases,  $P$  decreases,  $Q$  decreases

Answer: A

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 3) In 2004, hurricanes destroyed a large portion of Florida's orange and grapefruit crops. In the market for citrus fruit

- A) the supply curve shifted to the right resulting in an increase in the equilibrium price.
- B) the supply curve shifted to the left resulting in an increase in the equilibrium price.
- C) the demand curve shifted to the right resulting in an increase in the equilibrium price.
- D) the demand curve shifted to the left resulting in a decrease in the equilibrium price.

Answer: B

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 4) Olive oil producers want to sell more olive oil at a higher price. Which of the following events would have this effect?

- A) an increase in the price of olive oil presses
- B) a decrease in the cost of transporting olive oil to markets
- C) an increase in the price of land used to plant olives
- D) research finds that consumption of olive oil reduces the risk of heart disease

Answer: D

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 5) Orange juice drinkers want to consume more orange juice at a lower price. Which of the following events would have this effect?

- A) a decrease in the price of orange juice processing
- B) an increase in the cost of fertilizer used for orange groves
- C) a decrease in income, assuming orange juice is a normal good
- D) a decrease in the population

Answer: A

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) Which of the following would cause both the equilibrium price and equilibrium quantity of cotton (assume that cotton is a normal good) to increase?

- A) an increase in consumer income
- B) a drought that sharply reduces cotton output
- C) a decrease in consumer income
- D) unusually good weather that results in a bumper crop of cotton

Answer: A

Diff: 3 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 7) Which of the following would cause both the equilibrium price and equilibrium quantity of potatoes (assume that potatoes are an inferior good) to decrease?

- A) an increase in consumer income
- B) a freeze that sharply reduces potato output
- C) a decrease in consumer income
- D) a technological advancement that results in a bumper crop of potatoes

Answer: A

Diff: 3 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 8) Which of the following would cause the equilibrium price of white bread to decrease and the equilibrium quantity of white bread to increase?

- A) a decrease in the price of flour
- B) an increase in the price of flour
- C) an increase in the price of rye bread, a substitute for white bread
- D) an increase in the price of butter, a complement for white bread

Answer: A

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 9) Assume that the hourly price for the services of tarot card readers has risen and sales of these services have also risen. One can conclude that
- A) the law of demand has been violated.
  - B) the number of tarot card readers has increased.
  - C) the demand for tarot card readers has increased.
  - D) tarot card readers are deliberately charging high prices because they provide services for superstitious clients.

Answer: C

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 10) Assume that the price for swimming pool maintenance services has risen and sales of these services have fallen. One can conclude that
- A) the law of supply has been violated.
  - B) the demand for swimming pool maintenance services has increased.
  - C) the supply of swimming pool maintenance services has decreased.
  - D) swimming pool maintenance services are becoming more technologically advanced.

Answer: C

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 11) Prices of California Merlot wine (assume that this is a normal good) have risen steadily in recent years. Over this same period, prices for French oak barrels used for wine storage have dropped and consumer incomes have risen. Which of the following best explains the rising prices of California Merlots?
- A) The supply curve for Merlot has shifted to the right while the demand curve for Merlot has shifted to the left.
  - B) The demand curve for Merlot has shifted to the right more than the supply curve has shifted to the right.
  - C) The demand curve and the supply curve for Merlot have both shifted to the left.
  - D) The supply curve for Merlot has shifted to the right more than the demand curve has shifted to the right.

Answer: B

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 12) Prices of microbrewery beer (assume that this is a normal good) have risen steadily in recent years. Over this same period, prices for fermenting vats used in beer making have also risen and consumer incomes have fallen. Which of the following best explains the rising prices of microbrewery beer?
- A) The supply curve for microbrewery beer has shifted to the left while the demand curve for microbrewery beer has shifted to the right.
  - B) The demand curve for microbrewery beer has shifted to the left more than the supply curve has shifted to the left.

- C) The demand curve and the supply curve for microbrewery beer have both shifted to the right.
- D) The supply curve for microbrewery beer has shifted to the left more than the demand curve has shifted to the left.

Answer: D

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 13) In recent years the cost of producing organic produce in the U.S. has decreased largely due technological advancement. At the same time, more and more Americans prefer organic produce over conventional produce. Which of the following best explains the effect of these events in the organic produce market?
- A) The supply curve has shifted to the left and the demand curve has shifted to the right. As a result there has been an increase in the equilibrium quantity and an uncertain effect on the equilibrium price.
  - B) Both the supply and demand curves have shifted to the right. As a result, there has been an increase in the equilibrium quantity and an uncertain effect on the equilibrium price.
  - C) Both the supply and demand curves have shifted to the right. As a result, there has been an increase in both the equilibrium price and the equilibrium quantity.
  - D) The supply curve has shifted to the left and the demand curve has shifted to the right. As a result, there has been an increase in the equilibrium price and an uncertain effect on the equilibrium quantity.

Answer: B

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 14) The cost of producing cigarettes in the U.S. has increased and at the same time, more and more Americans are choosing to not smoke cigarettes. Which of the following best explains the effect of these events in the cigarette market?
- A) The supply curve has shifted to the right and the demand curve has shifted to the left. As a result there has been an increase in the equilibrium quantity and an uncertain effect on the equilibrium price.
  - B) Both the supply and demand curves have shifted to the right. As a result, there has been an increase in the equilibrium quantity and an uncertain effect on the equilibrium price.
  - C) Both the supply and demand curves have shifted to the left. As a result, there has been a decrease in the equilibrium quantity and an uncertain effect on the equilibrium price.
  - D) The supply curve has shifted to the right and the demand curve has shifted to the left. As a result, there has been an increase in the equilibrium price and an uncertain effect on the equilibrium quantity.

Answer: C

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 15) An article in the *Wall Street Journal* in early 2001 noted two developments in the market for laser eye surgery. The first development concerned side effects from the surgery, including blurred vision. The second development was that the companies renting eye-surgery machinery to doctors had reduced their charges. In the market for laser eye surgeries, these two developments
- A) decreased demand and decreased supply, resulting in a decrease in the equilibrium quantity and an increase in the equilibrium price of laser eye surgeries.
  - B) decreased demand and increased supply resulting in an increase in both the equilibrium quantity and the equilibrium price of laser eye surgeries.
  - C) decreased demand and increased supply, resulting in a decrease in the equilibrium price and an uncertain effect on the equilibrium quantity of laser eye surgeries.
  - D) decreased demand and increased supply, resulting in a decrease in both the equilibrium price and the equilibrium quantity of laser eye surgeries.

Answer: C

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) An increase in the demand for lobster due to changes in consumer tastes, accompanied by a decrease in the supply of lobster as a result bad weather reducing the number of fishermen trapping lobster, will result in
- A) a decrease in the equilibrium quantity of lobster and no change in the equilibrium price.
  - B) an increase in the equilibrium price of lobster and no change in the equilibrium quantity.
  - C) an increase in the equilibrium price of lobster; the equilibrium quantity may increase or decrease.
  - D) a decrease in the equilibrium quantity of lobster; the equilibrium price may increase or decrease.

Answer: C

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 17) A decrease in the demand for soft drinks due to changes in consumer tastes, accompanied by an increase in the supply of soft drinks as a result of reductions in input prices, will result in
- A) a decrease in the equilibrium quantity of soft drinks and no change in the equilibrium price.
  - B) a decrease in the equilibrium price of soft drinks and no change in the equilibrium quantity.
  - C) a decrease in the equilibrium price of soft drinks; the equilibrium quantity may increase or decrease.
  - D) an increase in the equilibrium quantity of soft drinks; the equilibrium price may increase or decrease.

Answer: C

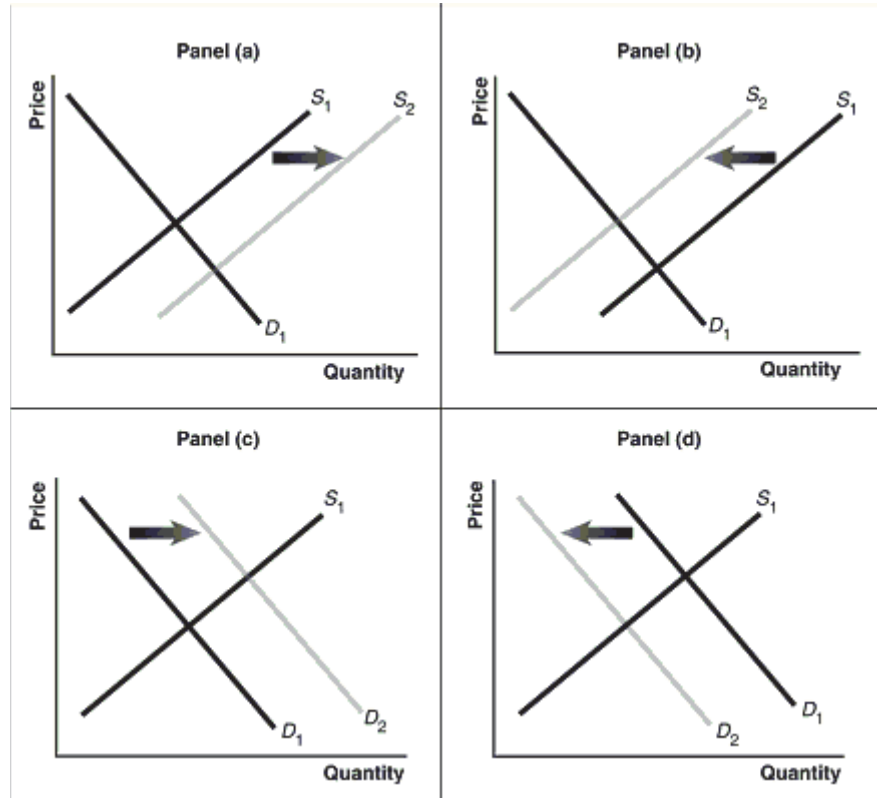
Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-7



- 18) Refer to Figure 3-7. Assume that the graphs in this figure represent the demand and supply curves for bicycle helmets. Which panel best describes what happens in this market if there is a substantial increase in the price of bicycles?

A) Panel (a)      B) Panel (b)      C) Panel (c)      D) Panel (d)

Answer: D

Diff: 2      Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) Refer to Figure 3-7. Assume that the graphs in this figure represent the demand and supply curves for women's clothing. Which panel best describes what happens in this market when the wages of seamstresses rise?

A) Panel (a)      B) Panel (b)      C) Panel (c)      D) Panel (d)

Answer: B

Diff: 2      Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 20) **Refer to Figure 3–7.** Assume that the graphs in this figure represent the demand and supply curves for almonds. Which panel best describes what happens in this market when there is an increase in the productivity of almond harvesters?

A) Panel (a)                      B) Panel (b)                      C) Panel (c)                      D) Panel (d)

Answer: A

Diff: 2      Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 21) **Refer to Figure 3–7.** Assume that the graphs in this figure represent the demand and supply curves for Fruitopia, a soft drink. Which panel describes what happens in the market for Fruitopia when the price of Snapple, a substitute product, decreases?

A) Panel (a)                      B) Panel (b)                      C) Panel (c)                      D) Panel (d)

Answer: D

Diff: 2      Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 22) **Refer to Figure 3–7.** Assume that the graphs in this figure represent the demand and supply curves for potatoes and that steak and potatoes are complements. What panel describes what happens in this market when the price of steak rises?

A) Panel (a)                      B) Panel (b)                      C) Panel (c)                      D) Panel (d)

Answer: D

Diff: 2      Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 23) **Refer to Figure 3–7.** Assume that the graphs in this figure represent the demand and supply curves for rice. What happens in this market if buyers expect the price of rice to fall?

A) Panel (a)                      B) Panel (b)                      C) Panel (c)                      D) Panel (d)

Answer: D

Diff: 2      Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 24) **Refer to Figure 3–7.** Assume that the graphs in this figure represent the demand and supply curves for used clothing, an inferior good. Which panel describes what happens in this market as a result of a decrease in income?

A) Panel (a)                      B) Panel (b)                      C) Panel (c)                      D) Panel (d)

Answer: C

Diff: 2      Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 25) Positive technological change in the production of LCD televisions caused the price of LCD televisions to fall. Holding everything else constant, how would this affect the market for Blu-ray players (a complement to LCD televisions)?
- A) The supply of Blu-ray players would increase and the equilibrium price of Blu-ray players would decrease.
  - B) The demand for Blu-ray players would increase and the equilibrium price of Blu-ray players would increase.
  - C) The demand for Blu-ray players would decrease because consumers could afford to buy fewer LCD televisions and Blu-ray players.
  - D) The demand for Blu-ray players would increase and the equilibrium price of Blu-ray players would decrease.

Answer: B

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 26) An increase in input costs in the production of electric automobiles caused the price of electric automobiles to rise. Holding everything else constant, how would this affect the market for gasoline-powered automobiles (a substitute for electric automobiles)?
- A) The supply of gasoline-powered automobiles would increase and the equilibrium price of gasoline-powered automobiles would decrease.
  - B) The demand for gasoline-powered automobiles would increase and the equilibrium price of gasoline-powered automobiles would increase.
  - C) The demand for gasoline-powered automobiles would decrease because consumers could afford to buy fewer gasoline-powered automobiles.
  - D) The demand for gasoline-powered automobiles would increase and the equilibrium price of gasoline-powered automobiles would decrease.

Answer: B

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 27) Assume that both the demand curve and the supply curve for MP3 players shift to the right but the demand curve shifts more than the supply curve. As a result
- A) both the equilibrium price and quantity of MP3 players will increase.
  - B) the equilibrium price of MP3 players will increase; the equilibrium quantity may increase or decrease.
  - C) the equilibrium price of MP3 players may increase or decrease; the equilibrium quantity will increase.
  - D) the equilibrium price of MP3 players will decrease; the equilibrium quantity may increase or decrease.

Answer: A

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 28) Assume that both the demand curve and the supply curve for MP3 players shift to the right but the supply curve shifts more than the demand curve. As a result
- A) both the equilibrium price and quantity of MP3 players will decrease.
  - B) the equilibrium price of MP3 players will decrease; the equilibrium quantity will increase.
  - C) the equilibrium price of MP3 players may increase or decrease; the equilibrium quantity will decrease.
  - D) the equilibrium price of MP3 players will increase; the equilibrium quantity will decrease.

Answer: B

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 29) Assume that the demand curve for MP3 players shifts to the right and the supply curve for MP3 players shift to the left, but the supply curve shifts more than the demand curve. As a result
- A) both the equilibrium price and quantity of MP3 players will decrease.
  - B) the equilibrium price of MP3 players will decrease; the equilibrium quantity will increase.
  - C) the equilibrium price of MP3 players may increase or decrease; the equilibrium quantity will decrease.
  - D) the equilibrium price of MP3 players will increase; the equilibrium quantity will decrease.

Answer: D

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 30) Assume that the demand curve for MP3 players shifts to the right and the supply curve for MP3 players shift to the left, but the supply curve shifts less than the demand curve. As a result
- A) both the equilibrium price and quantity of MP3 players will decrease.
  - B) both the equilibrium price and quantity of MP3 players will increase.
  - C) the equilibrium price of MP3 players may increase or decrease; the equilibrium quantity will decrease.
  - D) the equilibrium price of MP3 players will increase; the equilibrium quantity will decrease.

Answer: B

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 31) "The price of compact fluorescent light bulbs fell because of improvements in production technology. As a result, the demand for incandescent light bulbs decreased. This caused the price of incandescent light bulbs to fall; as the price of incandescent light bulbs fell the demand for incandescent light bulbs decreased even further." Evaluate this statement.
- A) The statement is false. A decrease in the price of compact fluorescent light bulbs would decrease the demand for incandescent light bulbs, but a decrease in the price of incandescent light bulbs would not cause the demand for incandescent light bulbs to decrease.
  - B) The statement is false because the demand for incandescent light bulbs would increase as the price of compact fluorescent light bulbs fell.
  - C) The statement is false because compact fluorescent light bulbs producers would not reduce their prices as a result of improvements in technology; doing so would reduce their profits.



D) The statement is false because it confuses the law of demand with the law of supply.

Answer: A

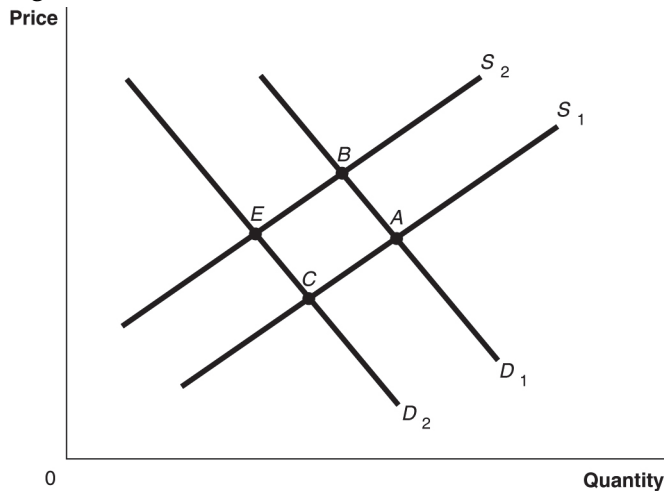
Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 3-8



- 32) Refer to Figure 3-8. The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_1$  and  $S_1$  (point A). If the price of oranges, a substitute for apples, decreases and the wages of apple workers increase, how will the equilibrium point change?

- A) The equilibrium point will move from A to E.
- B) The equilibrium point will move from A to B.
- C) The equilibrium point will move from A to C.
- D) The equilibrium will first move from A to B, then return to A.

Answer: A

Diff: 3 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 33) Refer to Figure 3-8. The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_1$  and  $S_1$  (point A). If there is a shortage of apples how will the equilibrium point change?

- A) The equilibrium point will move from A to B.
- B) The equilibrium point will move from A to C.
- C) There will be no change in the equilibrium point.
- D) The equilibrium point will move from A to E.

Answer: C

Diff: 2 Page Ref: 88

Topic: Shortage

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 34) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for sugar at the intersection of  $D_1$  and  $S_1$  (point A). If there is an increase in the price of fertilizer used on sugar cane and there is a decrease in tastes for sugar-sweetened soft drinks, how will the equilibrium point change?

- A) The equilibrium point will move from A to B.
- B) The equilibrium point will move from A to C.
- C) There will be no change in the equilibrium point.
- D) The equilibrium point will move from A to E.

Answer: D

Diff: 2 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 35) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for sugar at the intersection of  $D_1$  and  $S_2$  (point B). If there is an decrease in the price of fertilizer used on sugar cane and there is a decrease in tastes for sugar-sweetened soft drinks, how will the equilibrium point change?

- A) The equilibrium point will move from B to A.
- B) The equilibrium point will move from B to C.
- C) There will be no change in the equilibrium point.
- D) The equilibrium point will move from B to E.

Answer: B

Diff: 2 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 36) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_2$  and  $S_2$  (point E). Which of the following changes would cause the equilibrium to change to point A?

- A) A positive change in the technology used to produce apples and decrease in the price of oranges, a substitute for apples.
- B) An increase in the wages of apple workers and a decrease in the price of oranges, a substitute for apples.
- C) An increase in the number of apple producers and a decrease in the number of apple trees as a result of disease.
- D) A decrease in the wages of apple workers and an increase in the price of oranges, a substitute for apples.

Answer: D

Diff: 3 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 37) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_2$  and  $S_1$  (point C). Which of the following changes would cause the equilibrium to change to point B?
- A) A positive change in the technology used to produce apples and decrease in the price of oranges, a substitute for apples.
  - B) An increase in the wages of apple workers and an increase in the price of oranges, a substitute for apples.
  - C) An increase in the number of apple producers and a decrease in the number of apple trees as a result of disease.
  - D) A decrease in the wages of apple workers and an increase in the price of oranges, a substitute for apples.

Answer: B

Diff: 3 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 38) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_1$  and  $S_2$  (point B). Which of the following changes would cause the equilibrium to change to point C?
- A) A positive change in the technology used to produce apples and decrease in the price of oranges, a substitute for apples.
  - B) An increase in the wages of apple workers and an increase in the price of oranges, a substitute for apples.
  - C) An increase in the number of apple producers and a decrease in the number of apple trees as a result of disease.
  - D) A decrease in the wages of apple workers and an increase in the price of oranges, a substitute for apples.

Answer: A

Diff: 3 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 39) **Refer to Figure 3–8.** The graph in this figure illustrates an initial competitive equilibrium in the market for apples at the intersection of  $D_1$  and  $S_1$  (point A). If there is an increase in the wages of apple workers and an increase in the price of oranges, a substitute for apples, the equilibrium could move to which point?
- A) none of the points shown
  - B) B
  - C) C
  - D) E

Answer: A

Diff: 3 Page Ref: 88

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

40) Which of the following statements is *true*?

- A) An increase in demand causes a change in equilibrium price; the change in price does not cause a further change in demand or supply.
- B) A decrease in supply causes equilibrium price to rise; the increase in price then results in a decrease in demand.
- C) If both demand and supply increase there must be an increase in equilibrium price; equilibrium quantity may either increase or decrease.
- D) If demand decreases and supply increases one cannot determine if equilibrium price will increase or decrease without knowing which change is greater.

Answer: A

Diff: 3 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

41) Which of the following statements is *true*?

- A) An increase in supply causes a change in equilibrium price; the change in price does not cause a further change in demand or supply.
- B) A decrease in supply causes equilibrium price to rise; the increase in price then results in a decrease in demand.
- C) If both demand and supply increase there must be an increase in equilibrium price; equilibrium quantity may either increase or decrease.
- D) If demand decreases and supply increases one cannot determine if equilibrium price will increase or decrease without knowing which change is greater.

Answer: A

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

42) A decrease in the equilibrium price for a product will result

- A) when the quantity demanded for the product exceeds the quantity supplied.
- B) when there is a decrease in supply and a decrease in demand for the product.
- C) when there is an increase in supply and a decrease in demand for the product.
- D) when there is a decrease in demand and a decrease in the number of firms producing the product.

Answer: C

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

43) A decrease in the equilibrium quantity for a product will result

- A) when the quantity demanded for the product exceeds the quantity supplied.
- B) when there is a decrease in supply and a decrease in demand for the product.
- C) when there is an increase in supply and a decrease in demand for the product.
- D) when there is a decrease in demand and a decrease in the number of firms producing the product.

Answer: B

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 44) The following appeared in a Florida newspaper a week after a hurricane hit the state. "Floridians are relieved that the storm produced no fatalities but homeowners face weeks, if not months, of rebuilding. Matters are made worse by the soaring prices of plywood and other building materials that always follow in a hurricane's path. Complaints of profiteering and price gouging have not deterred firms from raising their prices by over 100 percent." Which of the following offers the best explanation for the price increases referred to in the article?
- A) The hurricane reduced the number of suppliers of building materials.
  - B) The hurricane created an artificial shortage of building materials.
  - C) The hurricane caused an increase in the demand for building materials.
  - D) There was a reduction in supply as firms shipped plywood and other materials to locations not affected by the storm.

Answer: C

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 45) Which of the following would cause a decrease in the equilibrium price and an increase in the equilibrium quantity of salmon?
- A) a decrease in demand and an increase in supply
  - B) an increase in supply
  - C) an increase in supply and an increase in demand greater than the increase in supply
  - D) a decrease in demand and a decrease in supply

Answer: B

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 46) Which of the following would cause an increase in the equilibrium price and an increase in the equilibrium quantity of watermelons?
- A) an increase in demand and an increase in supply
  - B) an increase in supply
  - C) an increase in supply and an increase in demand greater than the increase in supply
  - D) a decrease in demand and an increase in supply

Answer: C

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 47) Select the phrase that correctly completes the following statement. "A positive change in technology caused an increase in the supply of flat-screen televisions. As a result \_\_\_\_\_."
- A) the price of flat-screen televisions decreased and the demand for flat-screen televisions increased
  - B) the equilibrium quantity of flat-screen televisions decreased
  - C) the price of flat-screen televisions decreased and the quantity demanded of flat-screen televisions increased
  - D) the price of flat-screen televisions decreased. The lower price caused the supply of flat-screen televisions to decrease

Answer: C

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 48) Select the phrase that correctly completes the following statement. "An increase in input prices caused a decrease in the supply of baseballs. As a result \_\_\_\_\_."
- A) the price of baseballs increased and the demand for baseballs decreased
  - B) the equilibrium quantity of baseballs increased
  - C) the price of baseballs increased and the quantity demanded of baseballs decreased
  - D) the price of baseballs increased. The higher price caused the supply of baseballs to increase

Answer: C

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 49) What would happen in the market for laser eye surgery if insurance companies started to cover a portion of the price of voluntary procedures?
- A) Demand will increase, but this will not shift the supply curve.
  - B) Supply will increase, but this will not shift the demand curve.
  - C) Demand and supply will both increase.
  - D) Demand will increase and supply will decrease.

Answer: A

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 50) If more insurance companies decide to cover part of the price of voluntary laser eye surgery and more doctors decide to enter the field of laser eye surgery, what will happen in the market for laser eye surgery as a result of these two factors?
- A) Demand will increase, but these two factors will not shift the supply curve.
  - B) Supply will increase, but these two factors will not shift the demand curve.
  - C) Demand and supply will both increase.
  - D) Demand will increase and supply will decrease.

Answer: C

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 51) Blu-ray players were introduced to the market in 2006, and new technology has allowed for the cost of manufacturing the players to decline significantly since the initial introduction. How did this change in technology affect the market for Blu-ray players?
- A) The new technology caused an increase in the supply of Blu-ray players and a decrease in price of Blu-ray players.
  - B) The new technology caused an increase in the supply of Blu-ray players and an increase in price of Blu-ray players.
  - C) The new technology caused a decrease in the demand for Blu-ray players.
  - D) The new technology caused an increase in the quantity of Blu-ray players supplied.

Answer: A

Diff: 2 Page Ref: 86

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 52) "Because apples and oranges are substitutes, an increase in the price of oranges will cause the demand for apples to increase. This initial shift in demand for apples results in a higher price for apples; this higher price will cause the demand curve for apples to shift to the right." Which of the following correctly comments on this statement?
- A) The statement will be true if consumer tastes for apples and oranges do not change.
  - B) The statement is false because a change in the price of apples would not change the demand for apples.
  - C) The statement is false because oranges are inferior goods; apples are normal goods.
  - D) The statement is false because one cannot assume that apples and oranges are substitutes for all consumers.

Answer: B

Diff: 2 Page Ref: 90

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 53) "Because chips and salsa are complements, an increase in the price of chips will cause the demand for salsa to decrease. This initial shift in demand for chips results in a higher price for chips; this higher price will cause the demand curve for chips to shift to the right." Which of the following correctly comments on this statement?
- A) The statement will be true if consumer tastes for chips and salsa do not change.
  - B) The statement is false because a change in the price of chips would not change the demand for chips.
  - C) The statement is false because salsa is an inferior good; chips are normal goods.
  - D) The statement is false because one cannot assume that chips and salsa are complements for all consumers.

Answer: B

Diff: 2 Page Ref: 90

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 54) The cost of raising beef cattle has risen at the same time as consumer preference for beef has fallen. In the market for beef, this would be represented by the equilibrium price \_\_\_\_\_ and the equilibrium quantity \_\_\_\_\_.

A) increasing; increasing or decreasing  
 B) increasing or decreasing; decreasing  
 C) decreasing; increasing or decreasing  
 D) increasing or decreasing; increasing

Answer: B

Diff: 2 Page Ref: 88–90

Topic: Shifts in Demand and Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 55) All else equal, the decrease in consumer preference predicted by Apple for its iPhone 5 would be represented by a

A) shift the supply curve for iPhones to the right.  
 B) shift the supply curve for iPhones to the left.  
 C) shift the demand curve for iPhones to the right.  
 D) shift the demand curve for iPhones to the left.

Answer: D

Diff: 2 Page Ref: 92–93

Topic: Shifts in Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 56) Let  $D$  = demand,  $S$  = supply,  $P$  = equilibrium price,  $Q$  = equilibrium quantity. What happens in the market for electric vehicles if the government offers incentives to manufacturers to produce more electric vehicles?

A)  $D$  increases,  $S$  no change,  $P$  and  $Q$  increase  
 B)  $S$  increases,  $D$  no change,  $P$  decreases,  $Q$  increases  
 C)  $D$  and  $S$  increase,  $P$  and  $Q$  decrease  
 D)  $D$  no change,  $S$  increases,  $P$  decreases,  $Q$  decreases

Answer: B

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 57) Suppose favorable weather resulted in a bumper crop of oranges in Florida. In the market for oranges

A) the supply curve shifted to the right resulting in a decrease in the equilibrium price.  
 B) the supply curve shifted to the right resulting in an increase in the equilibrium price.  
 C) the demand curve shifted to the left resulting in a decrease in the equilibrium price.  
 D) the demand curve shifted to the right resulting in an increase in the equilibrium price.

Answer: A

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 58) Studies have shown that drinking one glass of red wine per day may help prevent heart disease. Assume this is true, and favorable weather has increased the grape harvest of California vineyards. In the market for red wine, these two developments would
- A) increase demand and decrease supply, resulting in an increase in the equilibrium quantity and a decrease in the equilibrium price of red wine.
  - B) increase demand and increase supply resulting in an increase in the equilibrium quantity and an uncertain effect on the equilibrium price of red wine.
  - C) increase demand and increase supply, resulting in an increase in the equilibrium price and an uncertain effect on the equilibrium quantity of red wine.
  - D) increase demand and increase supply, resulting in an increase in both the equilibrium price and the equilibrium quantity of red wine.

Answer: B

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 59) A decrease in the demand for incandescent light bulbs due to changes in consumer tastes, accompanied by a decrease in the supply of incandescent light bulbs as a result of government restrictions, will result in
- A) a decrease in the equilibrium quantity of incandescent light bulbs and no change in the equilibrium price.
  - B) a decrease in the equilibrium price of incandescent light bulbs and no change in the equilibrium quantity.
  - C) a decrease in the equilibrium price of incandescent light bulbs; the equilibrium quantity may increase or decrease.
  - D) a decrease in the equilibrium quantity of incandescent light bulbs; the equilibrium price may increase or decrease.

Answer: D

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 60) Suppose a negative technological change in the production of disease-resistant wheat caused the price of wheat to rise. Holding everything else constant, how would this affect the market for corn (a substitute for wheat)?
- A) The supply of corn would decrease and the equilibrium price of corn would increase.
  - B) The demand for corn would increase and the equilibrium price of corn would increase.
  - C) The demand for corn would decrease because consumers could afford to buy less wheat and corn.
  - D) The demand for corn would increase and the equilibrium price of corn would decrease.

Answer: B

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

*Article Summary*

A growing number of U.S. citizens are going to other countries for elective surgery procedures. Improved quality and significant cost savings abroad have attracted an increasing number of what are being referred to as American medical tourists, especially those who either do not have insurance or whose insurance does not cover the desired procedure. As few as five years ago, Americans tended to travel to countries such as Thailand or Mexico for the procedures, but many are now choosing to go to Europe, where governments and hospitals are now publicizing these services. Many of the procedures being done overseas are joint replacement, and partly in response to the number of patients going abroad for these procedures, programs are being developed to reduce the cost of these surgeries in the United States.

Source: Elizabeth Rosenthal, "The Growing Popularity of Having Surgery Overseas," *New York Times*, August 6, 2013.

- 61) *Refer to the Article Summary.* If more European governments and hospitals begin to offer and publicize their services to American medical tourists and, due to the growing number of aging baby boomers, more Americans desire joint-replacement surgery, what will happen in the market for joint-replacement surgery as a result of these two factors?

- A) Demand will increase, but these two factors will not shift the supply curve.
- B) Supply will increase, but these two factors will not shift the demand curve.
- C) Demand and supply will both increase.
- D) Demand will increase and supply will decrease.

Answer: C

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 62) If the demand for a product increases and the supply of the same product increases, the equilibrium price will increase.

Answer: FALSE

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 63) As the number of firms in a market decreases, the supply curve will shift to the left and the equilibrium price will rise.

Answer: TRUE

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 64) If the number of firms producing mouthwash increases and consumer preference for mouthwash increases, the equilibrium price of mouthwash will definitely increase.

Answer: FALSE

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 65) If the demand curve for a product shifts to the left and the supply curve for the product shifts to the left, the equilibrium quantity will decrease.

Answer: TRUE

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 66) If the demand for a product decreases and the supply of the same product decreases, the equilibrium price will decrease.

Answer: FALSE

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 67) As the number of firms in a market increases, the supply curve will shift to the right and the equilibrium quantity will rise.

Answer: TRUE

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 68) If the population increases and input prices decrease, the equilibrium quantity of a product will definitely increase.

Answer: TRUE

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 69) If the demand for a product increases and the supply of the product does not change, equilibrium price and equilibrium quantity will both increase.

Answer: TRUE

Diff: 2 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 70) Discuss the correct and incorrect economic analysis in the following statement.

"If good weather in Hawaii creates a bumper crop of pineapples, the supply of pineapples will increase. This will result in a price decrease, which will then cause the supply of pineapples to decrease."

Answer: The supply of pineapples will increase resulting in a lower equilibrium price and a higher equilibrium quantity but the lower price will not shift the supply curve for pineapples.

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 71) Explain how it would be possible for the equilibrium price and equilibrium quantity to both increase in the market for motorcycles if consumer preference for motorcycles increases and the number of motorcycle manufacturers decreases.

Answer: An increase in consumer preference will shift the demand curve to the right, which increases the equilibrium price and the equilibrium quantity. A decrease in the number of manufacturers will shift the supply curve to the left, which will increase the equilibrium price and decrease the equilibrium quantity. In both cases, the equilibrium price increases. For the equilibrium quantity to increase, the rightward shift in demand resulting from the increase in consumer preference must be more than the leftward shift in supply which results from the decrease in manufacturers.

Diff: 2 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 72) Discuss the correct and incorrect economic analysis in the following statement.

"The United Auto Workers Union has successfully negotiated a 9 percent increase in wages for its workers. This increase in the wage rate causes an increase in demand for automobiles, since many consumers now have greater incomes, and also a decrease in the supply of automobiles because the cost of production has increased. These effects cancel each other out resulting in no change in equilibrium price and quantity in the automobile market."

Answer: The wage rate is a determinant of the supply of automobiles, but not a determinant of the demand for automobiles. The increase in the wage rate will shift the automobile supply curve to the left along a given demand curve. This will result in a higher equilibrium price and a lower equilibrium quantity in the market for automobiles.

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 73) If a union successfully negotiates for higher wages and benefits for steel workers, what impact would this have on the supply and demand in the market for steel, assuming no other changes take place in this market?

Answer: An increase in wages and benefits will shift the supply curve to the left, but will not shift the demand curve. This will increase the equilibrium price and decrease the equilibrium quantity in the market for steel.

Diff: 3 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 74) Cigars are becoming increasingly popular in the United States, and a growing number of cigar manufacturers in the Caribbean and Central America have begun producing and exporting cigars to the U.S. market. How has this affected the equilibrium price and quantity of cigars?

Answer: The supply curve for cigars shifted to the right resulting in a lower equilibrium price and higher equilibrium quantity.

Diff: 2 Page Ref: 85

Topic: Shifts in Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 75) In 1984, the National Minimum Drinking Age Act was passed, raising the legal age to consume alcoholic beverages in the United States to 21. In much of Europe, the legal age to consume alcohol is 18. If the legal drinking age in the United States was changed back to 18, how would this affect the market for alcoholic beverages? What would happen to the equilibrium price and quantity of alcoholic beverages?

Answer: The demand for alcoholic beverages would increase, which would increase the equilibrium price and quantity.

Diff: 1 Page Ref: 87

Topic: Shifts in Demand

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 76) In each of the following situations, list what will happen to the equilibrium price and the equilibrium quantity for a particular product, which is a normal good.
- The population increases and the price of inputs increase.
  - The price of a complement increases and technology advances.
  - The number of firms in the market increases and income increases.
  - Price is expected to increase in the future.
  - Consumer preference increases and the price of a substitute in production decreases.

Answer: a. Price increases; Quantity may increase or decrease.

b. Price decreases; Quantity may increase or decrease.

c. Quantity increases; Price may increase or decrease.

d. Price increases; Quantity may increase or decrease.

e. Quantity increases; Price may increase or decrease.

Diff: 3 Page Ref: 87

Topic: Shifts in Demand and Supply

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 77) In each of the following situations, list what will happen to the equilibrium price and the equilibrium quantity for a particular product, which is an inferior good.
- The population increases and productivity increases.
  - The income increases and the price of inputs decrease.
  - The number of firms in the market decreases and income increases.
  - Consumer preference increases and the price of a complement decreases.
  - The price of a substitute in consumption decreases and the price of a substitute in production decreases.

- Answer: a. Quantity increases; Price may increase or decrease.  
b. Quantity increases; Price may increase or decrease.  
c. Quantity decreases; Price may increase or decrease.  
d. Price increases; Quantity increases.  
e. Price decreases; Quantity may increase or decrease.

*Diff:* 3      *Page Ref:* 87

*Topic:* Shifts in Demand and Supply

*Learning Outcome:* Micro-4: Explain how supply and demand function in competitive markets.

*AACSB:* Analytic thinking

# Chapter 4

## Economic Efficiency, Government Price Setting, and Taxes

### 4.1 Consumer Surplus and Producer Surplus

- 1) The difference between the highest price a consumer is willing to pay for a good and the price the consumer actually pays is called
- A) producer surplus.
  - B) the substitution effect.
  - C) the income effect.
  - D) consumer surplus.

Answer: D

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 2) In New York City, about 1 million apartments are subject to rent control by the local government. Rent control
- A) puts a legal limit on the rent that landlords can charge for an apartment.
  - B) is a price floor which sets a minimum rent for apartments.
  - C) only applies to those apartments which are owned and rented out by the local government.
  - D) is a government policy which limits apartment rental to those people whose incomes are less than \$50,000 per year.

Answer: A

Diff: 1 Page Ref: 101

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 3) In a city with rent-controlled apartments, all of the following are true *except*
- A) apartments usually rent for rates lower than the market rate.
  - B) apartments are often in shorter supply than they would be without rent control.
  - C) it usually takes more time to find an apartment than it would without rent control.
  - D) landlords have an incentive to rent more apartments than they would without rent control.

Answer: D

Diff: 2 Page Ref: 101

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 4) Paul goes to Sportsmart to buy a new tennis racquet. He is willing to pay \$200 for a new racquet, but buys one on sale for \$125. Paul's consumer surplus from the purchase is
- A) \$325.
  - B) \$200.
  - C) \$125.
  - D) \$75.

Answer: D

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 5) Frieda is at her local florist to buy a dozen roses. She is willing to pay \$75 for the roses, and buys them for \$75. Frieda's consumer surplus from the purchase is
- A) \$150.                      B) \$75.                      C) \$37.50.                      D) \$0.

Answer: D

Diff: 1      Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 6) Lucinda buys a new GPS system for \$250. She receives consumer surplus of \$75 from the purchase. How much does Lucinda value her GPS system?
- A) \$75                      B) \$175                      C) \$250                      D) \$325

Answer: D

Diff: 1      Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 7) Arthur buys a new cell phone for \$150. He receives consumer surplus of \$150 from the purchase. How much does Arthur value his cell phone?
- A) \$0                      B) \$150                      C) \$225                      D) \$300

Answer: D

Diff: 1      Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 8) Willingness to pay measures
- A) the maximum price a buyer is willing to pay for a product minus the amount the buyer actually pays for it.
- B) the amount a seller actually receives for a good minus the minimum amount the seller is willing to accept for the good.
- C) the maximum price that a buyer is willing to pay for a good.
- D) the maximum price a buyer is willing to pay minus the minimum price a seller is willing to accept.

Answer: C

Diff: 1      Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 9) Consumers are willing to purchase a product up to the point where
- A) the marginal benefit of consuming the product is equal to the marginal cost of consuming it.
- B) the consumer surplus is equal to the producer surplus.
- C) the marginal benefit of consuming the product equals the area below the supply curve and above the market price.
- D) the marginal benefit of consuming a product is equal to its price.

Answer: D



Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 10) Marginal benefit is equal to the \_\_\_\_\_ benefit to a consumer receives from consuming one more unit of a good or service.

A) total B) unintended C) additional D) surplus

Answer: C

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 11) Which of the following statements best describes the concept of consumer surplus?

A) "Safeway was having a sale on Dreyer's ice cream so I bought 3 quarts."  
 B) "I was all ready to pay \$300 for a new leather jacket that I had seen in Macy's but I ended up paying only \$180 for the same jacket."  
 C) "I paid \$130 for a printer last week. This week the same store is selling the same printer for \$110."  
 D) "I sold my Blu-ray copy of *Ben-Hur* for \$18 at a garage sale even though I was willing to sell it for \$10."

Answer: B

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 12) Each point on a \_\_\_\_\_ curve shows the willingness of consumers to purchase a product at different prices.

A) demand B) supply  
 C) production possibilities D) marginal cost

Answer: A

Diff: 2 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

**Table 4-1**

Consumer	Willingness to Pay
Tom	\$40
Dick	30
Harriet	25

- 13) *Refer to Table 4-1.* The table above lists the highest prices three consumers, Tom, Dick and Harriet, are willing to pay for a short-sleeved polo shirt. If the price of one of the shirts is \$28 dollars

A) Tom will buy two shirts, Dick will buy one shirt and Harriet will buy no shirts.  
 B) Tom will receive \$12 of consumer surplus from buying one shirt.  
 C) Tom and Dick receive a total of \$70 of consumer surplus from buying one shirt each.  
 Harriet will buy no shirts.

D) Harriet will receive \$25 of consumer surplus since she will buy no shirts.

Answer: B

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 14) **Refer to Table 4-1.** The table above lists the highest prices three consumers, Tom, Dick and Harriet, are willing to pay for a short-sleeved polo shirt. If the price of the shirts falls from \$28 to \$20

- A) consumer surplus increases from \$14 to \$35.
- B) Tom will buy two shirts; Dick and Harriet will each buy one shirt.
- C) consumer surplus will increase from \$70 to \$95.
- D) Harriet will receive more consumer surplus than Tom or Dick.

Answer: A

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

**Table 4-2**

Consumer	Willingness to Pay
Anya	\$24
Basil	20
Celeste	15
Dralon	12
Esther	7

- 15) **Refer to Table 4-2.** The table above lists the highest prices five consumers are willing to pay for a theater ticket. If the price of one of the tickets is \$18
- A) Anya and Basil will each buy two tickets.
  - B) Basil will receive \$2 of consumer surplus from buying one ticket.
  - C) Anya and Basil receive a total of \$26 of consumer surplus from buying one ticket each. No one else will buy a ticket.
  - D) Celeste, Dralon, and Esther will receive a total of \$34 of consumer surplus since they will buy no tickets.

Answer: B

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 16) **Refer to Table 4-2.** The table above lists the highest prices five consumers are willing to pay for a theater ticket. If the price of one of the tickets is \$10

- A) everyone will buy a ticket except for Esther.
- B) only Anya and Basil will buy tickets.
- C) Celeste's consumer surplus is \$25.
- D) the total consumer surplus from the purchase of tickets will be \$61.

Answer: A

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 17) **Refer to Table 4-2.** The table above lists the highest prices five consumers are willing to pay for a theater ticket. If the price of one ticket is \$25
- A) everyone will buy a ticket.
  - B) consumer surplus will be maximized.
  - C) Anya's consumer surplus is \$1.
  - D) no one will buy a ticket.

Answer: D

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 18) **Refer to Table 4-2.** The table above lists the highest prices five consumers are willing to pay for a theater ticket. If the price of one ticket rises from \$10 to \$19
- A) only three tickets will be sold.
  - B) consumer surplus decreases from \$31 to \$6.
  - C) consumer surplus increases from \$44 to \$71.
  - D) no one will buy a ticket.

Answer: B

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 19) **Refer to Table 4-2.** The table above lists the highest prices five consumers are willing to pay for a theater ticket. If the price of one ticket falls from \$25 to \$10
- A) only three tickets will be sold.
  - B) consumer surplus decreases from \$24 to \$12.
  - C) consumer surplus increases from \$0 to \$31.
  - D) everyone will buy a ticket.

Answer: C

Diff: 2 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 20) Marginal cost is
- A) the total cost of producing one unit of a good or service.
  - B) the average cost of producing a good or service.
  - C) the difference between the lowest price a firm would have been willing to accept and the price it actually receives.
  - D) the additional cost to a firm of producing one more unit of a good or service.

Answer: D

Diff: 1 Page Ref: 105

Topic: Marginal Cost

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

Table 4-3

The Waco Kid's Cowboy Hats	Marginal Cost (dollars)
1st hat	\$24
2nd hat	30
3rd hat	38
4th hat	46

- 21) *Refer to Table 4-3.* The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the market price of The Waco Kid's cowboy hats is \$40

A) The Waco Kid will produce four hats.  
 B) producer surplus from the first hat is \$40.  
 C) producer surplus will equal \$28.  
 D) there will be a surplus; as a result, the price will fall to \$24.

Answer: C

Diff: 3 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 22) *Refer to Table 4-3.* The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the price of cowboy hats increases from \$38 to \$46

A) consumers will buy no cowboy hats.  
 B) the marginal cost of producing the third cowboy hat will increase to \$46.  
 C) producer surplus will rise from \$22 to \$46.  
 D) there will be a surplus of cowboy hats.

Answer: C

Diff: 3 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 23) *Refer to Table 4-3.* The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the market price of cowboy hats is \$35, The Waco Kid will produce

A) 1 hat.                      B) 2 hats.                      C) 3 hats.                      D) 4 hats.

Answer: B

Diff: 2 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 24) **Refer to Table 4–3.** The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the market price of cowboy hats is \$50, how many hats will be produced?

A) 0                                      B) 1                                      C) 2                                      D) 4

Answer: D

Diff: 2      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 25) **Refer to Table 4–3.** The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the market price of cowboy hats is \$50, producer surplus is

A) \$0.                                      B) \$4.                                      C) \$62.                                      D) \$138.

Answer: C

Diff: 2      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 26) **Refer to Table 4–3.** The table above lists the marginal cost of cowboy hats by The Waco Kid, a firm that specializes in producing western wear. If the price of cowboy hats decreases from \$38 to \$30

A) consumer surplus will rise by \$6.  
 B) the marginal cost of producing the third cowboy hat will fall to \$30.  
 C) producer surplus will fall from \$22 to \$6.  
 D) producer surplus will rise from \$8 to \$24.

Answer: C

Diff: 2      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 27) The area \_\_\_\_\_ the market supply curve and \_\_\_\_\_ the market price is equal to the total amount of producer surplus in a market.

A) above; above                      B) above; below                      C) below; above                      D) below; below

Answer: B

Diff: 1      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 28) The total amount of producer surplus in a market is equal to
- A) the difference between quantity supplied and quantity demanded.
  - B) the area above the market supply curve and below the market price.
  - C) the area above the market supply curve.
  - D) the area between the demand curve and the supply curve below the market price.

Answer: B

Diff: 2 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 29) Consumer surplus in a market for a product would be equal to \_\_\_\_\_ if the market price was zero.
- A) zero
  - B) the area between the supply curve and the demand curve
  - C) the area above the supply curve
  - D) the area under the demand curve

Answer: D

Diff: 2 Page Ref: 104

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 30) Which of the following statements is true?
- A) Consumer surplus measures the total benefit from participating in a market.
  - B) When a market is in equilibrium consumer surplus equals producer surplus.
  - C) Consumer surplus measures the net benefit from participating in a market.
  - D) Producer surplus measures the total benefit received by producers from participating in a market.

Answer: C

Diff: 2 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 31) A \_\_\_\_\_ curve shows the marginal cost of producing one more unit of a good or service.
- A) demand
  - B) supply
  - C) production possibilities
  - D) marginal benefit

Answer: B

Diff: 1 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-12: Apply methods for measuring and analyzing the effects of inputs and costs on the supply curve.

AACSB: Analytic thinking

- 32) A demand curve shows
- A) the willingness of consumers to buy a product at different prices.
  - B) the willingness of consumers to substitute one product for another product.
  - C) the relationship between the price of a product and the demand for the product.
  - D) the relationship between the price of a product and the total benefit consumers receive from the product.

Answer: A

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

**Figure 4-1**

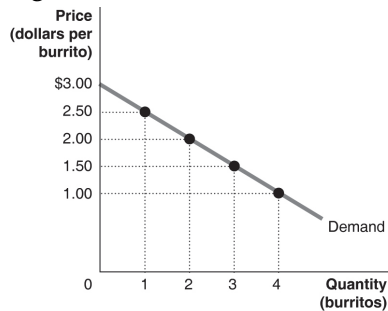


Figure 4-1 shows Arnold's demand curve for burritos.

- 33) **Refer to Figure 4-1.** Arnold's marginal benefit from consuming the third burrito is  
 A) \$1.25. B) \$1.50. C) \$2.50. D) \$6.00.

Answer: B

Diff: 1 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 34) **Refer to Figure 4-1.** Arnold's marginal benefit from consuming the second burrito is  
 A) \$1.00. B) \$1.50. C) \$2.00. D) \$4.50.

Answer: C

Diff: 1 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 35) **Refer to Figure 4-1.** Arnold's marginal benefit from consuming the fourth burrito is  
 A) \$0. B) \$1.00. C) \$2.50. D) \$3.00.

Answer: B

Diff: 1 Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 36) **Refer to Figure 4-1.** If the market price is \$1.00, what is the consumer surplus on the third burrito?

A) \$0.50                      B) \$1.00                      C) \$1.50                      D) \$7.50

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 37) **Refer to Figure 4-1.** If the market price is \$1.00, what is the consumer surplus on the fourth burrito?

A) \$0                              B) \$0.50                      C) \$1.50                      D) \$2.25

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 38) **Refer to Figure 4-1.** If the market price is \$1.00, what is Arnold's consumer surplus?

A) \$1.00                      B) \$2.00                      C) \$6.00                      D) \$7.00

Answer: C

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 39) **Refer to Figure 4-1.** If the market price is \$1.50, what is the consumer surplus on the first burrito?

A) \$0.50                      B) \$1.00                      C) \$1.50                      D) \$7.50

Answer: B

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 40) **Refer to Figure 4-1.** If the market price is \$1.50, what is the consumer surplus on the second burrito?

A) \$0.50                      B) \$1.00                      C) \$1.50                      D) \$3.50

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 41) **Refer to Figure 4-1.** If the market price is \$1.50, what is Arnold's consumer surplus?

A) \$1.50                      B) \$2.25                      C) \$3.00                      D) \$4.75

Answer: B

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking



- 42) **Refer to Figure 4-1.** If the market price is \$2.00, what is the consumer surplus on the first burrito?

A) \$0.50                      B) \$1.00                      C) \$2.00                      D) \$7.50

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 43) **Refer to Figure 4-1.** If the market price is \$2.00, what is the consumer surplus on the second burrito?

A) \$0                              B) \$1.00                      C) \$2.00                      D) \$4.50

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 44) **Refer to Figure 4-1.** If the market price is \$2.00, what is Arnold's consumer surplus?

A) \$0.50                      B) \$1.00                      C) \$1.50                      D) \$3.00

Answer: B

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 45) **Refer to Figure 4-1.** What is the total amount that Arnold is willing to pay for 2 burritos?

A) \$2.00                      B) \$4.50                      C) \$7.50                      D) \$10.00

Answer: B

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 46) **Refer to Figure 4-1.** What is the total amount that Arnold is willing to pay for 3 burritos?

A) \$1.50                      B) \$6.00                      C) \$7.00                      D) \$10.00

Answer: B

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 47) **Refer to Figure 4-1.** What is the total amount that Arnold is willing to pay for 4 burritos?

A) \$1.00                      B) \$4.00                      C) \$7.00                      D) \$10.00

Answer: C

Diff: 2      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 48) **Refer to Figure 4-1.** If the market price is \$1.00, what is the maximum number of burritos that Arnold will buy?

A) 1                                      B) 2                                      C) 3                                      D) 4

Answer: D

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 49) **Refer to Figure 4-1.** If the market price is \$3.00, what is the maximum number of burritos that Arnold will buy?

A) 0                                      B) 2                                      C) 3                                      D) 4

Answer: A

Diff: 1      Page Ref: 103

Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 50) Suppliers will be willing to supply a product only if

- A) the price received is less than the additional cost of producing the product.
- B) the price received is at least equal to the additional cost of producing the product.
- C) the price is higher than the average cost of producing the product.
- D) the price received is at least double the additional cost of producing the product.

Answer: B

Diff: 1      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 51) The difference between the \_\_\_\_\_ and the \_\_\_\_\_ from the sale of a product is called producer surplus.

- A) lowest price a firm would have been willing to accept; price it actually receives
- B) highest price a firm would have been willing to accept; lowest price it was willing to accept
- C) cost to produce a product; price a firm actually receives
- D) cost to produce a product; profit received

Answer: A

Diff: 1      Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking



- 55) Consumer surplus is the difference between the highest price someone is willing to pay for a product and the price he actually pays for the product.

Answer: TRUE

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 56) Producer surplus is the difference between the lowest price a firm is willing to accept for a product and the price it actually receives for the product.

Answer: TRUE

Diff: 1 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 57) The total amount of consumer surplus in a market is equal to the area below the demand curve.

Answer: FALSE

Diff: 1 Page Ref: 102

Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 58) The total amount of producer surplus in a market is equal to the area below the supply curve.

Answer: FALSE

Diff: 1 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 59) Marginal cost is the additional cost to a firm of producing one more unit of a good or service.

Answer: TRUE

Diff: 1 Page Ref: 105

Topic: Marginal Cost

Learning Outcome: Micro-12: Apply methods for measuring and analyzing the effects of inputs and costs on the supply curve.

AACSB: Analytic thinking

- 60) Marginal benefit is the total benefit to a consumer from consuming one more unit of a good or service.

Answer: FALSE

Diff: 1 Page Ref: 102

Topic: Marginal Benefit

Learning Outcome: Micro-12: Apply methods for measuring and analyzing the effects of inputs and costs on the supply curve.

AACSB: Analytic thinking

61) What is producer surplus? What does producer surplus measure?

Answer: Producer surplus is the difference between the lowest price a firm would be willing to accept for a good or service and the price it actually receives. Producer surplus measures the net benefit received by producers from participating in a market.

Diff: 1 Page Ref: 105

Topic: Producer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

62) What is marginal benefit? Which curve is also referred to as a marginal benefit curve?

Answer: Marginal benefit is the additional benefit to a consumer from consuming one more unit of a good. The demand curve is also referred to as a marginal benefit curve.

Diff: 2 Page Ref: 102

Topic: Marginal Benefit

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

63) What area on a supply and demand graph represents consumer surplus?

Answer: Consumer surplus is the area below the demand curve and above the market price.

Diff: 2 Page Ref: 104

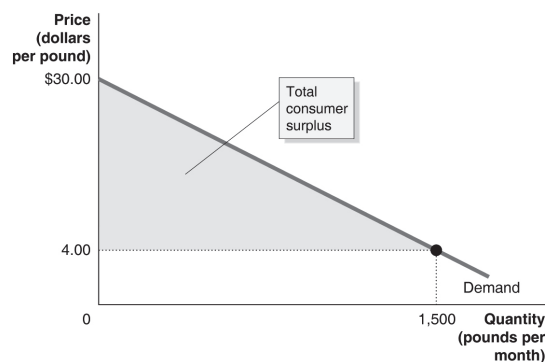
Topic: Consumer Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

64) Assume the market price for lemon grass is \$4.00 per pound, but most buyers are willing to pay more than the market price. At the market price of \$4.00, the quantity of lemon grass demanded is 1,500 pounds per month, and quantity demanded does not reach zero until the price reaches \$30.00 per pound. Construct a graph showing this data, calculate the total consumer surplus in the market for lemon grass, and show the consumer surplus on the graph.

Answer:



The total consumer surplus is  $(1/2 \times \$26 \times 1,500) = \$19,500$ .

Diff: 2 Page Ref: 104

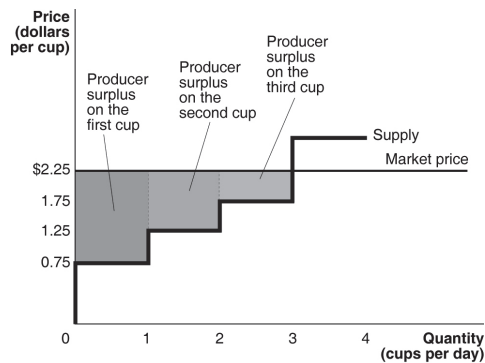
Topic: Consumer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 65) The marginal cost for Java Joe's to produce its first cup of coffee is \$0.75. Its marginal cost to produce its second cup of coffee is \$1.25. Its marginal cost increases by \$0.50 for each additional cup of coffee it produces. Suppose the market price for coffee is \$2.25. Construct a graph showing the producer surplus for each cup of coffee Java Joe's will sell. How many cups of coffee will Java Joe's sell? What is the value of the producer surplus Java Joe's receives for each cup of coffee it sells?

Answer:



Java Joe will sell 3 cups of coffee, the point where its marginal cost is equal to the market price. The producer surplus of the first cup of coffee is \$1.50. The producer surplus of the second cup of coffee is \$1.00. The producer surplus of the third cup of coffee is \$0.50.

Diff: 2 Page Ref: 106

Topic: Producer Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

## 4.2 The Efficiency of Competitive Markets

- 1) In a competitive market equilibrium
- A) total consumer surplus equals total producer surplus.
  - B) marginal benefit and marginal cost are maximized.
  - C) consumers and producers benefit equally.
  - D) the marginal benefit equals the marginal cost of the last unit sold.

Answer: D

Diff: 1 Page Ref: 107

Topic: Competitive Equilibrium

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 2) Economic efficiency in a competitive market is achieved when
- A) economic surplus is equal to consumer surplus.
  - B) consumers and producers are satisfied.
  - C) the marginal benefit equals the marginal cost from the last unit sold.
  - D) producer surplus equals the total amount firms receive from consumers minus the cost of production.

Answer: C

Diff: 1 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

Figure 4-3

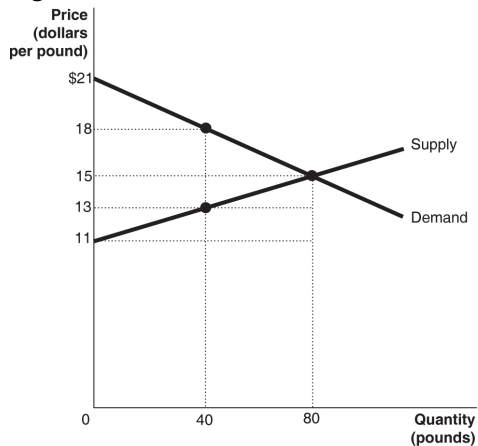


Figure 4-3 shows the market for tiger shrimp. The market is initially in equilibrium at a price of \$15 and a quantity of 80. Now suppose producers decide to cut output to 40 in order to raise the price to \$18.

- 3) Refer to Figure 4-3. What is the value of consumer surplus at a price of \$18?  
 A) \$60                      B) \$120                      C) \$180                      D) \$240

Answer: A

Diff: 2 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 4) Refer to Figure 4-3. What is the value of producer surplus at a price of \$18?  
 A) \$240                      B) \$300                      C) \$340                      D) \$720

Answer: A

Diff: 2 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 5) Refer to Figure 4-3. What is the value of the deadweight loss at a price of \$18?  
 A) \$100                      B) \$180                      C) \$660                      D) \$1,040

Answer: A

Diff: 2 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 6) **Refer to Figure 4-3.** At a price of \$18 consumers are willing to buy 40 pounds of tiger shrimp. Is this an economically efficient quantity?
- A) No, the marginal benefit of the 40th unit exceeds the marginal cost of that 80th unit.
  - B) Yes, otherwise consumers would not buy 40 units.
  - C) Yes, because \$18 shows what consumers are willing to pay for the product.
  - D) No, the marginal cost of the 40th unit exceeds the marginal benefit of the 40th unit.

Answer: A

Diff: 2 Page Ref: 108

Topic: Economic Efficiency

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 7) **Refer to Figure 4-3.** What is the value of consumer surplus at the equilibrium price of \$15?
- A) \$60
  - B) \$120
  - C) \$180
  - D) \$240

Answer: D

Diff: 2 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 8) **Refer to Figure 4-3.** What is the value of producer surplus at the equilibrium price of \$15?
- A) \$80
  - B) \$160
  - C) \$240
  - D) \$400

Answer: B

Diff: 2 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 9) **Refer to Figure 4-3.** What is the value of the deadweight loss at the equilibrium price of \$15?
- A) \$0
  - B) \$40
  - C) \$60
  - D) \$100

Answer: A

Diff: 2 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 10) **Refer to Figure 4-3.** At the equilibrium price of \$15 consumers are willing to buy 80 pounds of tiger shrimp. Is this an economically efficient quantity?
- A) No, the marginal benefit of the 80th unit exceeds the marginal cost of the 80th unit.
  - B) Yes, because marginal cost is zero at the 80th unit.
  - C) Yes, because \$15 is the price where the marginal benefit is equal to the marginal cost.
  - D) No, the marginal cost of the 80th unit exceeds the marginal benefit of the 80th unit.

Answer: C

Diff: 2 Page Ref: 108

Topic: Economic Efficiency

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking



- 11) \_\_\_\_\_ refers to the reduction in economic surplus resulting from not being in competitive equilibrium.

A) Marginal cost  
B) Producer atrophy  
C) Deadweight loss  
D) Economic shortage

Answer: C

Diff: 1 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 12) Economic surplus

A) does not exist when a competitive market is in equilibrium.  
B) is equal to the sum of consumer surplus and producer surplus.  
C) is the difference between quantity demanded and quantity supplied when the market price for a product is greater than the equilibrium price.  
D) is equal to the difference between consumer surplus and producer surplus.

Answer: B

Diff: 1 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 13) \_\_\_\_\_ is maximized in a competitive market when marginal benefit equals marginal cost.

A) Deadweight loss  
B) Marginal profit  
C) Economic surplus  
D) Selling price

Answer: C

Diff: 2 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 14) Economic efficiency is defined as a market outcome in which the marginal benefit to consumers of the last unit produced is equal to the marginal cost of production, and in which

A) the sum of consumer surplus and producer surplus is at a maximum.  
B) economic surplus is minimized.  
C) the sum of the benefits to firms is equal to the sum of the benefits to consumers.  
D) the sum of consumer surplus and producer surplus is minimized.

Answer: A

Diff: 2 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 15) If, in a competitive market, marginal benefit is less than marginal cost

A) the net benefit to consumers from participating in the market is less than the net benefit to producers.  
B) the government must force producers to raise prices in order to achieve economic efficiency.  
C) the quantity sold is greater than the equilibrium quantity.  
D) the quantity sold is less than the equilibrium quantity.

Answer: C

Diff: 3 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) In a competitive market the demand curve shows the \_\_\_\_\_ received by consumers and the supply curve shows the \_\_\_\_\_.  
 A) utility; average cost.  
 B) marginal benefit; marginal cost  
 C) economic surplus; opportunity cost  
 D) net benefit; net cost

Answer: B

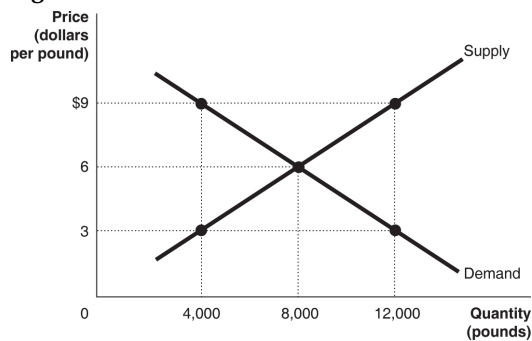
Diff: 1 Page Ref: 108

Topic: Economic Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

**Figure 4-4**



- 17) Refer to Figure 4-4. The figure above represents the market for pecans. Assume that this is a competitive market. At a price of \$9  
 A) the marginal cost of pecans is greater than the marginal benefit; therefore, output is inefficiently low.  
 B) producers should lower the price to \$3 in order to sell the quantity demanded of 4,000.  
 C) the marginal benefit of pecans is greater than the marginal cost; therefore, output is inefficiently high.  
 D) the marginal benefit of pecans is greater than the marginal cost; therefore, output is inefficiently low.

Answer: C

Diff: 2 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 18) Refer to Figure 4-4. The figure above represents the market for pecans. Assume that this is a competitive market. At a price of \$3  
 A) the marginal cost of pecans is greater than the marginal benefit; therefore, output is inefficiently low.  
 B) producers should raise the price to \$9 in order to sell the quantity demanded of 12,000.  
 C) the marginal benefit of pecans is greater than the marginal cost; therefore, output is inefficiently high.  
 D) the marginal benefit of pecans is greater than the marginal cost; therefore, output is inefficiently low.

Answer: A

Diff: 2 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 19) **Refer to Figure 4–4.** The figure above represents the market for pecans. Assume that this is a competitive market. If the price of pecans is \$3
- A) economic surplus is maximized.
  - B) not enough consumers want to buy pecans.
  - C) the quantity supplied is less than the economically efficient quantity.
  - D) the quantity supplied is economically efficient but the quantity demanded is economically inefficient.

Answer: C

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 20) **Refer to Figure 4–4.** The figure above represents the market for pecans. Assume that this is a competitive market. If the price of pecans is \$9
- A) economic surplus is maximized.
  - B) too many consumers want to buy pecans.
  - C) the quantity supplied is greater than the economically efficient quantity.
  - D) the quantity demanded is economically efficient but the quantity supplied is economically inefficient.

Answer: C

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 21) **Refer to Figure 4–4.** The figure above represents the market for pecans. Assume that this is a competitive market. If the price of pecans is \$3, what changes in the market would result in an economically efficient output?
- A) The price would increase, the quantity supplied would decrease, and the quantity demanded would increase.
  - B) The quantity supplied would increase, the quantity demanded would decrease and the equilibrium price would increase.
  - C) The price would increase, the demand would decrease and the supply would increase.
  - D) The price would increase, the quantity demanded would decrease and the quantity supplied would increase.

Answer: D

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 22) **Refer to Figure 4-4.** The figure above represents the market for pecans. Assume that this is a competitive market. If the price of pecans is \$9, what changes in the market would result in an economically efficient output?
- A) The price would decrease, the quantity supplied would decrease, and the quantity demanded would increase.
  - B) The quantity supplied would increase, the quantity demanded would decrease and the equilibrium price would decrease.
  - C) The price would decrease, the demand would increase and the supply would decrease.
  - D) The price would increase, the quantity demanded would decrease and the quantity supplied would increase.

Answer: A

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 23) **Refer to Figure 4-4.** The figure above represents the market for pecans. Assume that this is a competitive market. If 8,000 pounds of pecans are sold
- A) the deadweight loss is equal to economic surplus.
  - B) producer surplus equals consumer surplus.
  - C) the marginal benefit of each of the 8,000 pounds of pecans equals \$9.
  - D) marginal benefit is equal to marginal cost.

Answer: D

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 24) **Refer to Figure 4-4.** The figure above represents the market for pecans. Assume that this is a competitive market. If 4,000 pounds of pecans are sold
- A) the deadweight loss is equal to \$12,000.
  - B) consumer surplus equals zero.
  - C) the marginal benefit of each of the 4,000 pounds of pecans equals \$3.
  - D) marginal benefit is equal to marginal cost.

Answer: A

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 25) **Refer to Figure 4-4.** The figure above represents the market for pecans. Assume that this is a competitive market. Which of the following is *true*?
- A) If the price of pecans is \$3 the output will be economically efficient but there will be a deadweight loss.
  - B) If the price of pecans is \$9 consumers will purchase more than the economically efficient output.
  - C) Both 4,000 pounds and 12,000 pounds are economically inefficient rates of output.
  - D) If the price of pecans is \$3 producers will sell 12,000 pounds of pecans but this output will be economically inefficient.

Answer: C

Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

26) If equilibrium is achieved in a competitive market

- A) there is no deadweight loss.
- B) the deadweight loss will be maximized.
- C) the deadweight loss will equal the sum of consumer surplus and producer surplus.
- D) the deadweight loss will be the same as the opportunity cost of the last unit of output sold.

Answer: A

Diff: 1 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

27) If there is a market outcome in which the marginal benefit to consumers of the last unit produced is equal to its marginal cost of production and consumer surplus plus producer surplus is maximized, then

- A) maximum deadweight loss occurs.
- B) economic efficiency is achieved.
- C) profits are maximized.
- D) costs are minimized.

Answer: B

Diff: 2 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

28) Economic efficiency is a market outcome in which the marginal benefit of consumers is equal to the marginal cost of production and the sum of consumer surplus and producer surplus is maximized.

Answer: TRUE

Diff: 1 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

29) If marginal benefit is greater than marginal cost, output is inefficiently high.

Answer: FALSE

Diff: 1 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

30) Deadweight loss refers to the reduction in economic surplus resulting from a market not being in competitive equilibrium.

Answer: TRUE

Diff: 1 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 31) If the market price is at equilibrium, the deadweight loss is maximized.

Answer: FALSE

Diff: 1 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 32) If the market price is at equilibrium, the producer surplus is minimized.

Answer: FALSE

Diff: 1 Page Ref: 108

Topic: Deadweight Loss

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 33) The sum of consumer surplus and producer surplus is called economic surplus.

Answer: TRUE

Diff: 1 Page Ref: 107

Topic: Economic Surplus

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 34) What is economic surplus? When is economic surplus at a maximum?

Answer: Economic surplus is sum of consumer surplus and producer surplus. Economic surplus is at a maximum when the market is in equilibrium.

Diff: 1 Page Ref: 109

Topic: Economic Surplus

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 35) Will equilibrium in a market always result in an outcome that is economically efficient? Explain.

Answer: An economically efficient outcome means that at the equilibrium price the marginal benefit of the last unit of output sold is equal to its marginal cost. This will occur only in markets that are competitive (many buyers and many sellers) and there are no price controls.

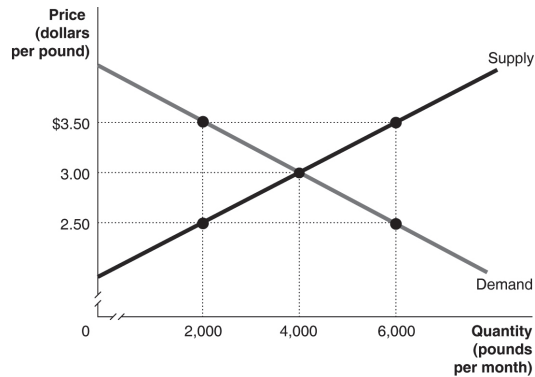
Diff: 1 Page Ref: 109

Topic: Economic Efficiency

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 36) The graph below represents the market for walnuts. Identify the values of the marginal benefit and the marginal cost at the output levels of 2,000 pounds, 4,000 pounds and 6,000 pounds. At each of these output levels, state whether output is inefficiently high, inefficiently low, or economically efficient.



Answer: Output level = 2,000 lbs.: marginal benefit = \$3.50, marginal cost = \$2.50, output is inefficiently low.

Output level = 4,000 lbs: marginal benefit = \$3.00, marginal cost = \$3.00, output is economically efficient.

Output level = 6,000 lbs: Marginal benefit = \$2.50, marginal cost = \$3.50, output is inefficiently high.

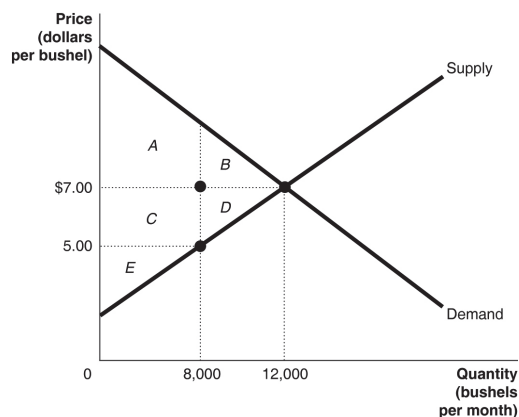
Diff: 1 Page Ref: 108–109

Topic: Economic Efficiency

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 37) The graph below represents the market for lychee nuts. The equilibrium price is \$7.00 per bushel, but the market price is \$5.00 per bushel. Identify the areas representing consumer surplus, producer surplus, and deadweight loss at the equilibrium price of \$7.00 and at the market price of \$5.00.



Answer: At the equilibrium price of \$7.00:

Consumer surplus is represented by area  $A + B$ .

Producer surplus is represented by area  $C + D + E$ .

There is no deadweight loss.

At the market price of \$5.00:

Consumer surplus is represented by area  $A + C$ .

Producer surplus is represented by area  $E$ .

Deadweight loss is represented by area  $B + D$ .

Diff: 2 Page Ref: 108–109

Topic: Economic Surplus

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

### 4.3 Government Intervention in the Market: Price Floors and Price Ceilings

1) When a competitive equilibrium is achieved in a market

- A) all individuals are better off than they would be if a price ceiling or price floor was imposed by government.
- B) the total net benefit to society is maximized.
- C) the total benefits to consumers are equal to the total benefits to producers.
- D) economic surplus equals the deadweight loss.

Answer: B

Diff: 1 Page Ref: 109

Topic: Competitive Equilibrium

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

**Table 4–4**

Hourly Wage (dollars)	Quantity of Labor Supplied	Quantity of Labor Demanded
\$7.50	530,000	650,000
8.50	550,000	630,000
9.50	570,000	610,000
10.50	590,000	590,000
11.50	610,000	570,000
12.50	630,000	550,000

Table 4–4 shows the demand and supply schedules for labor market in the city of Pixley.

2) *Refer to Table 4–4.* What is the equilibrium hourly wage ( $W^*$ ) and the equilibrium quantity of labor ( $Q^*$ )?

- A)  $W^* = \$10.50$ ;  $Q^* = 590,000$
- B)  $W^* = \$11.50$ ;  $Q^* = 570,000$
- C)  $W^* = \$9.50$ ;  $Q^* = 570,000$
- D)  $W^* = \$10.50$ ;  $Q^* = 1,200,000$

Answer: A

Diff: 1 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking



- 3) **Refer to Table 4-4.** If a minimum wage of \$11.50 an hour is mandated, what is the quantity of labor demanded?

A) 40,000                      B) 570,000                      C) 610,000                      D) 1,180,000

Answer: B

Diff: 1      Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

- 4) **Refer to Table 4-4.** If a minimum wage of \$11.50 an hour is mandated, what is the quantity of labor supplied?

A) 40,000                      B) 570,000                      C) 610,000                      D) 1,180,000

Answer: C

Diff: 1      Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

- 5) **Refer to Table 4-4.** If a minimum wage of \$11.50 is mandated there will be a

A) shortage of 20,000 units of labor.                      B) surplus of 20,000 units of labor.  
C) shortage of 40,000 units of labor.                      D) surplus of 40,000 units of labor.

Answer: D

Diff: 1      Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) **Refer to Table 4-4.** If a minimum wage of \$12.50 an hour is mandated, what is the quantity of labor demanded?

A) 80,000                      B) 550,000                      C) 630,000                      D) 1,180,000

Answer: B

Diff: 1      Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

- 7) **Refer to Table 4-4.** If a minimum wage of \$12.50 an hour is mandated, what is the quantity of labor supplied?

A) 80,000                      B) 550,000                      C) 630,000                      D) 1,180,000

Answer: C

Diff: 1      Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

- 8) **Refer to Table 4–4.** If a minimum wage of \$12.50 is mandated there will be a
- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| A) shortage of 40,000 units of labor. | B) surplus of 40,000 units of labor. |
| C) shortage of 80,000 units of labor. | D) surplus of 80,000 units of labor. |

Answer: D

Diff: 1 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 9) **Refer to Table 4–4.** Suppose that the quantity of labor demanded decreases by 80,000 at each wage level. What are the new free market equilibrium hourly wage and the new equilibrium quantity of labor?
- |                                 |                                  |
|---------------------------------|----------------------------------|
| A) $W = \$8.50$ ; $Q = 550,000$ | B) $W = \$12.50$ ; $Q = 630,000$ |
| C) $W = \$9.50$ ; $Q = 570,000$ | D) $W = \$9.50$ ; $Q = 590,000$  |

Answer: A

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 10) **Refer to Table 4–4.** Suppose that the quantity of labor demanded increases by 40,000 at each wage level. What are the new free market equilibrium hourly wage and the new equilibrium quantity of labor?
- |                                 |                                  |
|---------------------------------|----------------------------------|
| A) $W = \$8.50$ ; $Q = 550,000$ | B) $W = \$12.50$ ; $Q = 630,000$ |
| C) $W = \$9.50$ ; $Q = 570,000$ | D) $W = \$11.50$ ; $Q = 610,000$ |

Answer: D

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 11) **Refer to Table 4–4.** Suppose that the quantity of labor supplied increases by 40,000 at each wage level. What are the new free market equilibrium hourly wage and the new equilibrium quantity of labor?
- |                                 |                                  |
|---------------------------------|----------------------------------|
| A) $W = \$8.50$ ; $Q = 550,000$ | B) $W = \$12.50$ ; $Q = 630,000$ |
| C) $W = \$9.50$ ; $Q = 610,000$ | D) $W = \$11.50$ ; $Q = 610,000$ |

Answer: C

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 12) *Refer to Table 4-4.* Suppose that the quantity of labor supplied decreases by 80,000 at each wage level. What are the new free market equilibrium hourly wage and the new equilibrium quantity of labor?

A)  $W = \$8.50$ ;  $Q = 550,000$   
C)  $W = \$8.50$ ;  $Q = 630,000$

B)  $W = \$12.50$ ;  $Q = 550,000$   
D)  $W = \$11.50$ ;  $Q = 610,000$

Answer: B

Diff: 2      Page Ref: 110

Topic: Price Floors

*Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.*

AACSB: Analytic thinking

- 13) Which of the following is *not* a consequence of minimum wage laws?

A) Low skilled workers are hurt because minimum wage reduces the number of jobs providing low skilled workers with training.

B) Employers will be reluctant to offer low-skill workers jobs with training.

C) Producers have an incentive to offer workers non-wage benefits such as health care benefits and convenient working hours rather than a higher wage.

D) Some workers benefit when the minimum wage is increased.

Answer: C

Diff: 1      Page Ref: 110

Topic: Price Floors

**Learning Outcome:** Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 14) Rent control is an example of

A) a subsidy for low-skilled workers.

B) a price floor.

C) a price ceiling.

D) a black market.

Answer: C

Diff: 1      Page Ref: 112

Topic: Price Ceilings

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

AACSB: Analytic thinking

- 15) To affect the market outcome, a price ceiling

A) must be set below the black market price.

B) must be set below the legal price.

C) must be set below the price floor.

D) must be set below the equilibrium price.

Answer: D

Diff: 1      Page Ref: 112

Topic: Price Ceilings

*Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.*

AACSB: Analytic thinking

- 16) Government intervention in agricultural markets in the U.S. began in the  
 A) 1920s.                      B) 1930s.                      C) 1950s.                      D) 1970s.

Answer: B

Diff: 1      Page Ref: 109

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

- 17) Economists refer a to a market where buying and selling take place at prices that violate government price regulations as  
 A) a black market.                      B) an outlaw market.  
 C) a noncompetitive market.                      D) a restricted market.

Answer: A

Diff: 1      Page Ref: 113

Topic: Black Markets

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Figure 4-5**

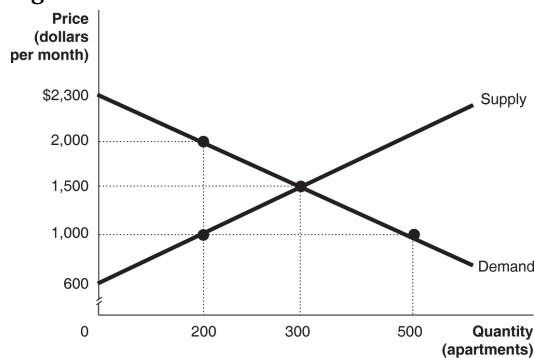


Figure 4-5 shows the market for apartments in Springfield. Recently, the government imposed a rent ceiling of \$1,000 per month.

- 18) Refer to Figure 4-5. With rent control, the quantity supplied is 200 apartments. Suppose apartment owners ignore the law and rent this quantity for the highest rent they can get. What is the highest rent they can get per month?  
 A) \$1,000                      B) \$1,500                      C) \$2,000                      D) \$2,300

Answer: C

Diff: 3      Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 19) **Refer to Figure 4-5.** What is the value of consumer surplus after the imposition of the ceiling?  
 A) \$120,000                      B) \$230,000                      C) \$270,000                      D) \$430,000

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 20) **Refer to Figure 4-5.** What is the value of producer surplus after the imposition of the ceiling?  
 A) \$40,000                      B) \$100,000                      C) \$300,000                      D) \$430,000

Answer: A

Diff: 3      Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 21) **Refer to Figure 4-5.** What is the value of the portion of producer surplus transferred to consumers as a result of the rent ceiling?  
 A) \$40,000                      B) \$100,000                      C) \$125,000                      D) \$140,000

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 22) **Refer to Figure 4-5.** What is the value of the deadweight loss after the imposition of the ceiling?  
 A) \$50,000                      B) \$125,000                      C) \$175,000                      D) \$260,000

Answer: A

Diff: 3      Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 23) **Refer to Figure 4-5.** Suppose that instead of a rent ceiling, the government imposed a price floor of \$2,000 per month for apartments. What is the quantity of apartments demanded at the new price?

A) 0                      B) 200                      C) 300                      D) 500

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 24) *Refer to Figure 4-5.* Suppose that instead of a rent ceiling, the government imposed a price floor of \$2,000 per month for apartments. What is the value of consumer surplus after the imposition of the price floor?

A) \$6,000                      B) \$30,000                      C) \$100,000                      D) \$240,000

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 25) *Refer to Figure 4-5.* Suppose that instead of a rent ceiling, the government imposed a price floor of \$2,000 per month for apartments. What is the value of producer surplus after the imposition of the price floor?

A) \$40,000                      B) \$240,000                      C) \$270,000                      D) \$290,000

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 26) *Refer to Figure 4-5.* Suppose that instead of a rent ceiling, the government imposed a price floor of \$2,000 per month for apartments. What is the value of the portion of consumer surplus transferred to producers as a result of the price floor?

A) \$40,000                      B) \$100,000                      C) \$125,000                      D) \$140,000

Answer: B

Diff: 3      Page Ref: 112

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 27) *Refer to Figure 4-5.* Suppose that instead of a rent ceiling, the government imposed a price floor of \$2,000 per month for apartments. What is the value of the deadweight loss after the imposition of the price floor?

A) \$50,000                      B) \$125,000                      C) \$175,000                      D) \$260,000

Answer: A

Diff: 3      Page Ref: 112

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 28) Which term refers to a legally established minimum price that firms may charge?

A) a price ceiling                      B) a subsidy                      C) a price floor                      D) a tariff

Answer: C

Diff: 1      Page Ref: 109

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 29) In order to be binding, a price ceiling
- A) must lie above the free market equilibrium price.
  - B) must lie below the free market equilibrium price.
  - C) must coincide with the free market equilibrium price.
  - D) must be high enough for firms to earn a profit.

Answer: B

Diff: 2 Page Ref: 113

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 30) A minimum wage law dictates
- A) the minimum quantity of labor that a firm must employ.
  - B) the lowest wage that firms may pay for labor.
  - C) the highest wage that firms must pay for labor.
  - D) the minimum qualifications for labor.

Answer: B

Diff: 1 Page Ref: 111-112

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 4-6

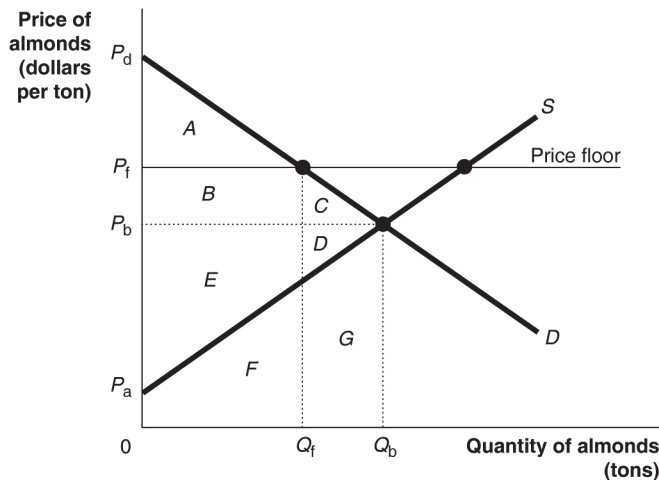


Figure 4-6 shows the demand and supply curves for the almond market. The government believes that the equilibrium price is too low and tries to help almond growers by setting a price floor at  $P_f$ .

- 31) Refer to Figure 4-6. What area represents consumer surplus after the imposition of the price floor?
- A)  $A + B + E$
  - B)  $A + B$
  - C)  $A + B + E + F$
  - D)  $A$

Answer: D

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 32) **Refer to Figure 4-6.** What is the area that represents producer surplus after the imposition of the price floor?

A)  $A + B + E$                       B)  $B + E$                       C)  $B + E + F$                       D)  $B + C + D + E$

Answer: B

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 33) **Refer to Figure 4-6.** What area represents the portion of consumer surplus that has been transferred to producer surplus as a result of the price floor?

A) B                      B)  $B + C$                       C)  $B + E$                       D) E

Answer: A

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 34) **Refer to Figure 4-6.** What area represents the deadweight loss after the imposition of the price floor?

A)  $C + D + G$                       B)  $F + G$                       C)  $C + D$                       D)  $C + D + F + G$

Answer: C

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 35) Congress passed the \_\_\_\_\_ in 1996, the purpose of which was to phase out price floors and return to a free market in agriculture

A) Rice and Beans Act                      B) Smoot-Hawley Act  
C) Agribusiness Act                      D) Freedom to Farm Act

Answer: D

Diff: 1 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 36) David Card and Alan Kruger conducted a study of fast-food restaurants in New Jersey and Pennsylvania. The study found that

A) there was a large reduction in employment of low-skilled workers when the minimum wage was raised in these states.  
B) the earned income tax credit is more effective in raising the incomes of low-skilled workers than increases in the minimum wage.  
C) increases in the minimum wage had a very small impact on employment.  
D) increases in the prices of food have a greater effect on wage increases in New Jersey than in Pennsylvania.



Answer: C

Diff: 1 Page Ref: 111–112

Topic: Price Floors

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 37) Which of the following is *not* a result of imposing a rent ceiling?
- A) Some consumer surplus is converted to producer surplus.
  - B) There is a reduction in the quantity supplied of apartments.
  - C) There is an increase in the quantity demanded of apartments.
  - D) The marginal benefit of the last apartment rented is greater than the marginal cost of supplying it.

Answer: A

Diff: 2 Page Ref: 113

Topic: Price Ceilings

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 38) In the economic sense, almost everything is scarce. \_\_\_\_\_ of a good or service occurs when the quantity demanded is greater than the quantity supplied at the current market price.
- A) Scarcity
  - B) A shortage
  - C) A surplus
  - D) An overstock

Answer: B

Diff: 2 Page Ref: 113

Topic: Price Ceilings

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 39) In cities with rent controls, the actual rents paid can be higher than the legal maximum. One explanation for this is
- A) rent control laws are so complicated that landlords and tenants may not be aware of what the legal price is.
  - B) landlords are allowed to charge more than the legal maximum on some apartments so long as they charge less on others.
  - C) because there is a shortage of apartments, tenants often are willing to pay rents higher than the law allows.
  - D) the legal penalty landlords face for charging more than the legal maximum rent is less than the revenue earned by charging their tenants more than the maximum rent.

Answer: C

Diff: 2 Page Ref: 114–115

Topic: Price Ceilings

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 40) Suppose a price floor on sparkling wine is proposed by the Health Minister of the country of Vinyardia. What will be the likely effect on the market for sparkling wine in Vinyardia?
- A) Quantity demanded will decrease, quantity supplied will increase, and a surplus will result.
  - B) Quantity demanded will increase, quantity supplied will decrease, and a surplus will result.
  - C) Quantity demanded will decrease, quantity supplied will increase, and a shortage will result.

D) Quantity demanded will increase, quantity supplied will decrease, and a shortage will result.

Answer: A

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

41) Suppose a price floor on sparkling wine is proposed by the Health Minister of the country of Vinyardia. What will be the likely effect on the market for sparkling wine in Vinyardia?

- A) Consumer surplus will increase.
- B) Producer surplus will increase.
- C) Deadweight loss will increase.
- D) Market efficiency will increase.

Answer: C

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

42) Which of the following is *not* a result of government price controls?

- A) Some people win and some people lose.
- B) Price controls benefit poor consumers but harm producers and wealthy consumers.
- C) Price controls decrease economic efficiency.
- D) A deadweight loss will occur.

Answer: B

Diff: 2 Page Ref: 115

Topic: Price Controls

Learning Outcome: Micro-25: Discuss the economics of income distribution and discrimination.

AACSB: Analytic thinking

43) Economists are reluctant to state that price controls are desirable or undesirable because

- A) it is impossible to evaluate the impact on quantity demanded and quantity supplied as a result of price controls.
- B) whether the gains from the winners exceed the losses from the losers is not strictly an economic question.
- C) sometimes price controls result in increases in economic efficiency and sometimes they result in decreases in economic efficiency.
- D) economists are reluctant to conduct positive analysis of price controls.

Answer: B

Diff: 2 Page Ref: 115

Topic: Price Controls

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### Article Summary

In an attempt to discourage smoking, New York City Mayor Michael Bloomberg proposed a bill which would set a \$10.50 minimum price for a pack of cigarettes. The bill would also prohibit retailers from offering any discounts such as 2-for-1 offers or accepting discount coupons. New York City already has the highest cigarette tax in the country, at \$5.85 per pack, and the state of New York is one of many which already require cigarettes be marked up by a specified percentage. This bill is a companion to one which would require stores to keep tobacco products hidden from sight. Although the bills are expected to be

challenged in court, a precedent has been set in Rhode Island, where a court upheld a ruling allowing the city of Providence to forbid retailers from accepting coupons and offering discounts on cigarettes.

Source: Vivian Yee, "Bloomberg Seeks End to Cheap Cigarettes," *New York Times*, March 26, 2013.

- 44) *Refer to the Article Summary.* The minimum price of \$10.50 per pack of cigarettes being proposed by Mayor Bloomberg is an example of
- A) a price ceiling.
  - B) a price floor.
  - C) an economically efficient price.
  - D) a black market price.

Answer: B

Diff: 2 Page Ref: 109

Topic: Price Floors

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 45) *Refer to the Article Summary.* The minimum price of \$10.50 per pack of cigarettes being proposed by mayor Bloomberg would have which of the following effects on the market for cigarettes?
- A) Consumer surplus will increase.
  - B) Producer surplus will increase.
  - C) Deadweight loss will increase.
  - D) Market efficiency will increase.

Answer: C

Diff: 2 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 46) Companies in the sharing economy have the potential to lower the equilibrium price in their market, and by doing so increase efficiency. This would have a tendency to
- A) increase producer surplus and increase deadweight loss.
  - B) increase consumer surplus and decrease deadweight loss.
  - C) decrease consumer surplus and decrease producer surplus.
  - D) maximize consumer surplus and minimize producer surplus.

Answer: B

Diff: 2 Page Ref: 115

Topic: Consumer Surplus

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 47) The minimum wage is an example of a price ceiling.

Answer: FALSE

Diff: 1 Page Ref: 110

Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

48) A price ceiling is a legally determined maximum price that sellers may charge.

Answer: TRUE

Diff: 1 Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

49) Shortage means the same thing as scarcity.

Answer: FALSE

Diff: 1 Page Ref: 113

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

50) Black markets only exist in developing nations.

Answer: FALSE

Diff: 1 Page Ref: 113

Topic: Black Markets

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

51) Rent control is an example of a price ceiling.

Answer: TRUE

Diff: 1 Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

52) Price ceilings are illegal in the United States.

Answer: FALSE

Diff: 1 Page Ref: 112

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

53) What is the difference between a price ceiling and a price floor? Compared to the competitive equilibrium price, where must price ceilings and price floors be set to have an effect on the market.

Answer: A price ceiling is a legally determined maximum price that sellers may charge for a good or service. A price floor is a legally determined minimum price that sellers may receive for a product or service. To have an effect on a market, price ceilings must be set below the competitive equilibrium price, and price floors must be set above the competitive equilibrium price.

Diff: 1 Page Ref: 109

Topic: Price Controls

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

54) What is a black market?

Answer: A black market is a market in which buying and selling take place at prices that violate government price regulations.

Diff: 1 Page Ref: 113

Topic: Black Markets

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

55) What is the difference between scarcity and a shortage?

Answer: Scarcity is a situation in which unlimited wants exceed the limited resources available to fulfill those wants. A shortage of a good occurs only if the quantity demanded is greater than the quantity supplied at the current price.

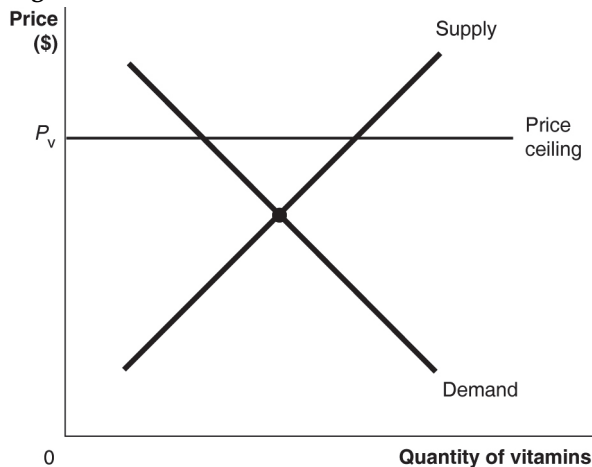
Diff: 2 Page Ref: 113

Topic: Shortage

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 4-7



56) Refer to Figure 4-7 which shows the market for vitamins. Suppose the government imposes a price ceiling of  $P_v$ . How will the price ceiling affect the quantity supplied, quantity demanded and quantity exchanged?

Answer: The price ceiling will have no effect on the market outcome. An effective price ceiling must lie below the free market equilibrium. Thus, in this case the market outcome will be determined by forces of demand and supply.

Diff: 3 Page Ref: 112-113

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Table 4-5

Price per Bushel (dollars)	Quantity Demanded (bushels)	Quantity Supplied (bushels)
\$2	40,000	0
4	34,000	4,000
6	28,000	8,000
8	24,000	16,000
10	20,000	20,000
12	18,000	28,000
14	12,000	36,000
16	6,000	40,000

Table 4-5 above contains information about the corn market. Answer the following questions based on this table.

- 57) *Refer to Table 4-5.* An agricultural price floor is a price that the government guarantees farmers will receive for a particular crop. Suppose the federal government sets a price floor for corn at \$12 per bushel.
- What is the amount of shortage or surplus in the corn market as result of the price floor?
  - If the government agrees to purchase any surplus output at \$12, how much will it cost the government?
  - If the government buys all of the farmers' output at the floor price, how many bushels of corn will it have to purchase and how much will it cost the government?
  - Suppose the government buys up all of the farmers' output at the floor price and then sells the output to consumers at whatever price it can get. Under this scheme, what is the price at which the government will be able to sell off all of the output it had purchased from farmers? What is the revenue received from the government's sale?
  - In this problem we have considered two government schemes: (1) a price floor is established and the government purchases any excess output and (2) the government buys all the farmers' output at the floor price and resells at whatever price it can get. Which scheme will taxpayers prefer?
  - Consider again the two schemes. Which scheme will the farmers prefer?
  - Consider again the two schemes. Which scheme will corn buyers prefer?

Answer: a. 10,000 surplus.  
 b.  $\$12 \times 10,000 = \$120,000$ .  
 c.  $28,000 \text{ bushels} \times \$12 = \$336,000$ .  
 d. \$6 per bushel and government receives  $\$6 \times 28,000 = \$168,000$ .  
 e. Taxpayers prefer scheme (1).  
 f. In terms of revenue, farmers are indifferent between the two schemes.  
 g. Corn buyers prefer scheme (2).

Diff: 3 Page Ref: 110

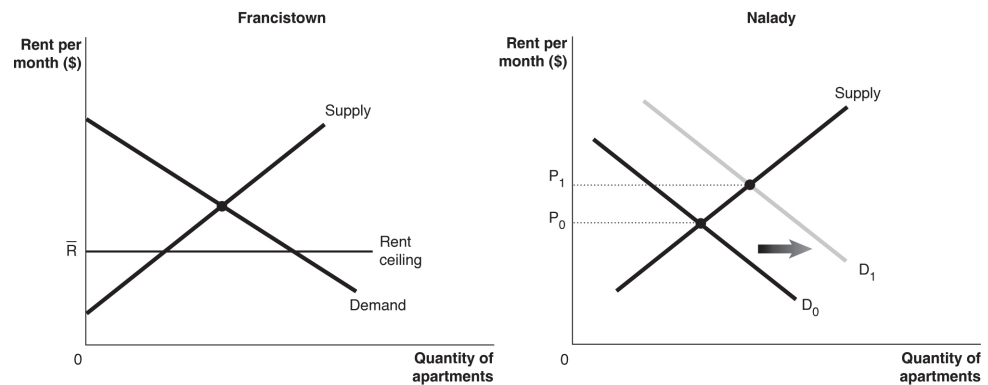
Topic: Price Floors

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 58) The cities of Francistown and Nalady are five miles apart. Francistown enacts a rent control law that puts a ceiling on rents well below their equilibrium market value. Predict the impact of this law on the competitive equilibrium rent in Nalady, which does not have a rent control law.
- Illustrate your answer with one demand and supply graph for the apartment market in Francistown and another demand and supply graph for the apartment market in Nalady.
  - Make sure that your graphs clearly show (1) the initial equilibrium before the rent control in both markets and (2) what happens after the imposition of rent control.
  - Clearly show any shifts in the demand or supply curves, and the movement along the curves for each market.
  - Label your graphs fully and provide written explanation for your graphs.

Answer: See the figure below. The rent ceiling in Francistown creates a shortage of apartments. Renters will move to Nalady, causing the demand for apartments curve in Nalady to shift to the right. The price and quantity of apartments in Nalady increase.



Diff: 3 Page Ref: 112–113

Topic: Price Ceilings

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

#### 4.4 The Economic Impact of Taxes

- 1) The actual division of the burden of a tax between buyers and sellers in a market is called
- tax incidence.
  - tax liability.
  - tax bearer.
  - tax parity.

Answer: A

Diff: 1 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

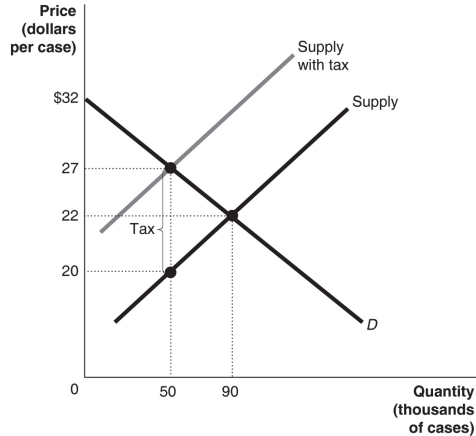
**Figure 4-8**

Figure 4-8 shows the market for beer. The government plans to impose a unit tax in this market.

2) Refer to Figure 4-8. What is the size of the unit tax?

- A) \$2                      B) \$5                      C) \$7                      D) \$12

Answer: C

Diff: 1      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

3) Refer to Figure 4-8. How much of the tax is paid by buyers?

- A) \$2                      B) \$5                      C) \$7                      D) \$12

Answer: B

Diff: 2      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

4) Refer to Figure 4-8. The price buyers pay after the tax is

- A) \$7.                      B) \$20.                      C) \$22.                      D) \$27.

Answer: D

Diff: 1      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

5) Refer to Figure 4-8. For each unit sold, the price sellers receive after the tax (net of tax) is

- A) \$20.                      B) \$22.                      C) \$27.                      D) \$32.

Answer: A

Diff: 1      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking



6) **Refer to Figure 4-8.** How much of the tax is paid by producers?

- A) \$2                                      B) \$5                                      C) \$7                                      D) \$12

Answer: A

Diff: 2      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

7) **Refer to Figure 4-8.** As a result of the tax, is there a loss in consumer surplus?

- A) Yes, because consumers paying a price above the economically efficient price.  
 B) No, because the producer pays the tax.  
 C) No, because the market reaches a new equilibrium  
 D) No, because consumers are charged a lower price to cover their tax burden.

Answer: A

Diff: 2      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

8) The government proposes a tax on imported champagne. Buyers will bear the entire burden of the tax if the

- A) supply curve for imported champagne is vertical.  
 B) demand curve for imported champagne is vertical.  
 C) demand curve for imported champagne is horizontal.  
 D) demand curve is downward sloping and the supply curve is upward sloping.

Answer: B

Diff: 3      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

9) Suppose the demand curve for a product is vertical and the supply curve is upward sloping. If a unit tax is imposed in the market for this product

- A) sellers bear the entire burden of the tax.  
 B) buyers bear the entire burden of the tax.  
 C) the tax burden will be shared equally between buyers and sellers.  
 D) buyers share the burden of the tax with government.

Answer: B

Diff: 2      Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

10) Suppose the demand curve for a product is horizontal and the supply curve is upward sloping. If a unit tax is imposed in the market for this product

- A) sellers bear the entire burden of the tax.  
 B) the tax burden will be shared among the government, buyers and sellers.  
 C) buyers bear the entire burden of the tax.  
 D) the tax burden will be shared by buyers and sellers.

Answer: A

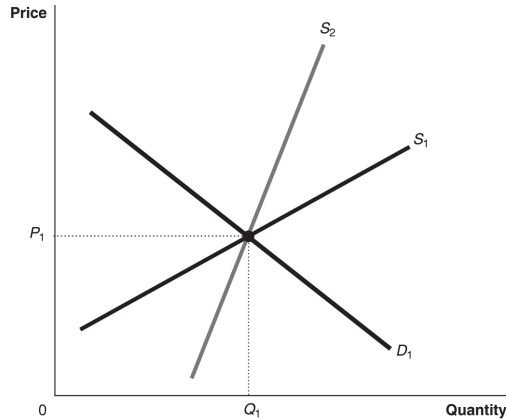
Diff: 2 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

Figure 4-9



11) Refer to Figure 4-9. Suppose the market is initially in equilibrium at price  $P_1$  and now the government imposes a tax on every unit sold. Which of the following statements best describes the impact of the tax? For demand curve  $D_1$

- A) the producer bears a greater share of the tax burden if the supply curve is  $S_2$ .
- B) the producer bears a greater share of the tax burden if the supply curve is  $S_1$ .
- C) the producer's share of the tax burden is the same whether the supply curve is  $S_1$  or  $S_2$ .
- D) the producer bears the entire burden of the tax if the supply curve is  $S_1$  and the consumer bears the entire burden of the tax if the supply curve is  $S_2$ .

Answer: A

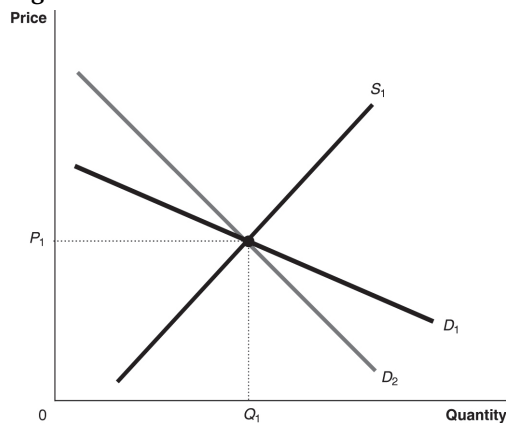
Diff: 3 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

Figure 4-10



- 12) *Refer to Figure 4-10.* Suppose the market is initially in equilibrium at price  $P_1$  and then the government imposes a tax on every unit sold. Which of the following statements best describes the impact of the tax?
- A) The consumer will bear a smaller share of the tax burden if the demand curve is  $D_1$ .
  - B) The consumer's share of the tax burden is the same whether the demand curve is  $D_1$  or  $D_2$ .
  - C) The consumer will bear a smaller share of the tax burden if the demand curve is  $D_2$ .
  - D) The consumer will bear the entire burden of the tax if the demand curve is  $D_2$  and the producer will bear the entire burden of the tax if the demand curve is  $D_1$ .

Answer: A

Diff: 2 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 13) Suppose an excise tax of \$1 is imposed on every case of beer sold and sellers are responsible for paying this tax. How would the imposition of the tax be illustrated in a graph?
- A) The supply curve for cases of beer would shift to the right by \$1.
  - B) The supply curve for cases of beer would shift to the left by more than \$1.
  - C) The supply curve for cases of beer would shift to the left by less than \$1.
  - D) The supply curve for cases of beer would shift to the left by \$1.

Answer: D

Diff: 1 Page Ref: 117

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 14) Suppose that in Canada the government places a \$1,500 tax on the buyers of new snowmobiles. After the purchase of a new snowmobile, a buyer must pay the government \$1,500. How would the imposition of the tax on buyers be illustrated in a graph?
- A) The tax will shift the supply curve to the left by \$1,500.
  - B) The tax will shift the demand curve to the right by \$1,500.
  - C) The tax will shift both the demand and supply curve to the right by \$1,500.
  - D) The tax will shift the demand curve to the left by \$1,500.

Answer: D

Diff: 2 Page Ref: 117

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 15) When Congress passed a law that imposed a tax designed to fund its Social Security and Medicare programs it wanted employers and workers to share the burden of the tax equally. Most economists who have studied the incidence of the tax have concluded
- A) the tax is not high enough to cover the future costs of Social Security and Medicare.
  - B) the tax on employers is too high because it reduces the employment of low-skilled workers.
  - C) the burden of the tax falls almost entirely on workers.
  - D) the tax rate should be greater for high income workers than for low income workers.

Answer: C

Diff: 2 Page Ref: 119–120

Topic: Tax Incidence

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 16) The payroll tax is a tax imposed on \_\_\_\_\_ that is used to fund Social Security and Medicare.
- A) employers only
  - B) workers only
  - C) employers and workers
  - D) the unemployed

Answer: C

Diff: 2 Page Ref: 119–120

Topic: Tax Incidence

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 17) When the government taxes a good or service, it
- A) affects the market equilibrium for that good or service.
  - B) eliminates the deadweight loss associated with the good or service.
  - C) increases consumer surplus for the good or service.
  - D) increases producer surplus for the good or service.

Answer: A

Diff: 1 Page Ref: 116

Topic: The Economic Impact of Taxes

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 18) Economists have shown that the burden of a tax is the same whether the tax is collected from the buyer or the seller. Why, then, are gasoline and cigarette taxes imposed on sellers?
- A) Sellers are more honest than buyers.
  - B) The demand for both gasoline and cigarettes is very elastic.
  - C) The Equal Protection Clause of the U.S. Constitution prohibits the government from imposing taxes like these on buyers.
  - D) It is more difficult for buyers to keep track of their purchases, and for the government to verify that the right amount of tax revenue is collected.

Answer: D

Diff: 1 Page Ref: 119

Topic: The Economic Impact of Taxes

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 19) A tax that imposes a small excess burden relative to the tax revenue that it raises is
- A) a payroll tax.
  - B) a sin tax.
  - C) an efficient tax.
  - D) a FICA tax.

Answer: C

Diff: 1 Page Ref: 116

Topic: The Economic Impact of Taxes

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 20) The division of the burden of a tax between buyers and sellers in a market is called tax allocation.

Answer: FALSE

Diff: 1 Page Ref: 117

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 21) A tax is efficient if it imposes a large excess burden relative to the tax revenue it raises.

Answer: FALSE

Diff: 1 Page Ref: 116

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 22) If the demand curve for a product is vertical, any tax increase on the product is paid for entirely by the consumer.

Answer: TRUE

Diff: 1 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 23) The incidence of a tax depends on whether the government collects the tax from buyers or sellers.

Answer: FALSE

Diff: 1 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 24) One result of a tax is an increase in economic efficiency.

Answer: FALSE

Diff: 1 Page Ref: 117

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 25) The excess burden of a tax is also a deadweight loss.

Answer: TRUE

Diff: 1 Page Ref: 117

Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

26) What is "tax incidence"? What determines tax incidence in a competitive market?

Answer: Tax incidence refers to the actual division of the burden of a tax between buyers and sellers in a market. In a competitive market, tax incidence is determined by the forces of supply and demand in that market.

Diff: 1 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

27) What do economists mean by an *efficient tax*?

Answer: A tax is efficient if it imposes a small excess burden relative to the tax revenue it raises.

Diff: 1 Page Ref: 116

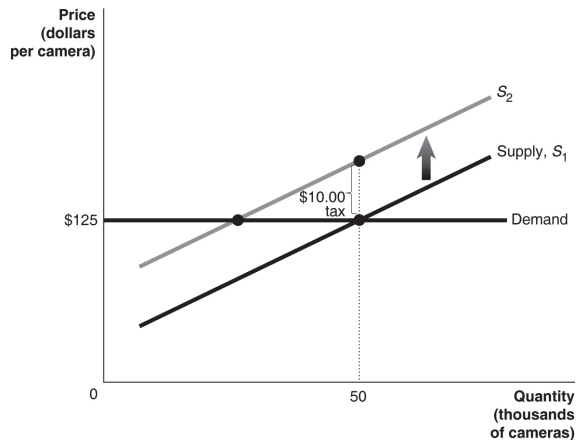
Topic: The Economic Impact of Taxes

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

28) Using a supply and demand graph, illustrate the effect of the addition of a \$10.00 unit tax on digital cameras, where the entire tax burden falls on the seller. Assume the equilibrium price before the tax is \$125 and the equilibrium quantity is 50,000. What happens to the price and quantity after the tax is implemented?

Answer:



Price does not change and quantity decreases.

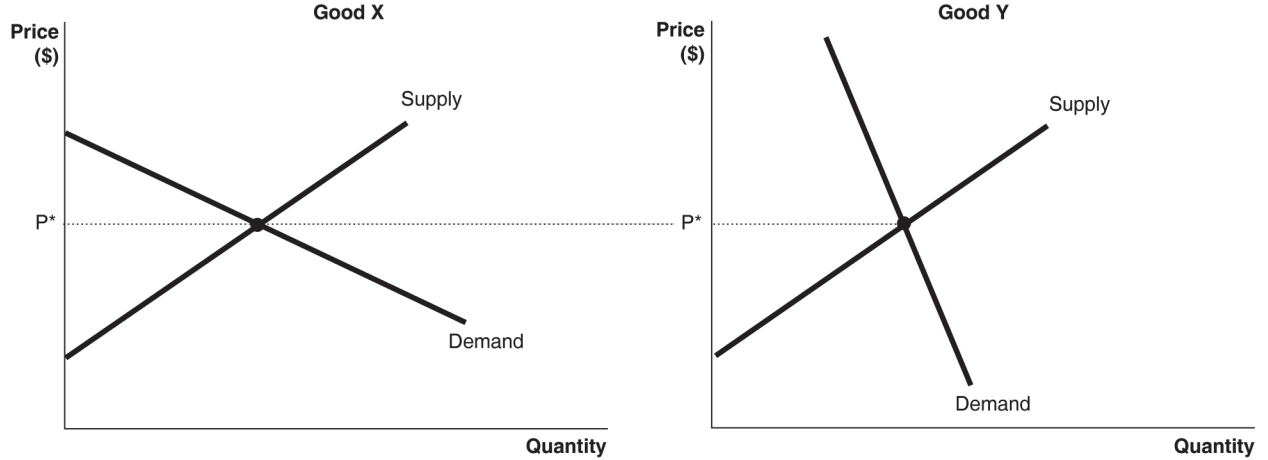
Diff: 2 Page Ref: 118

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

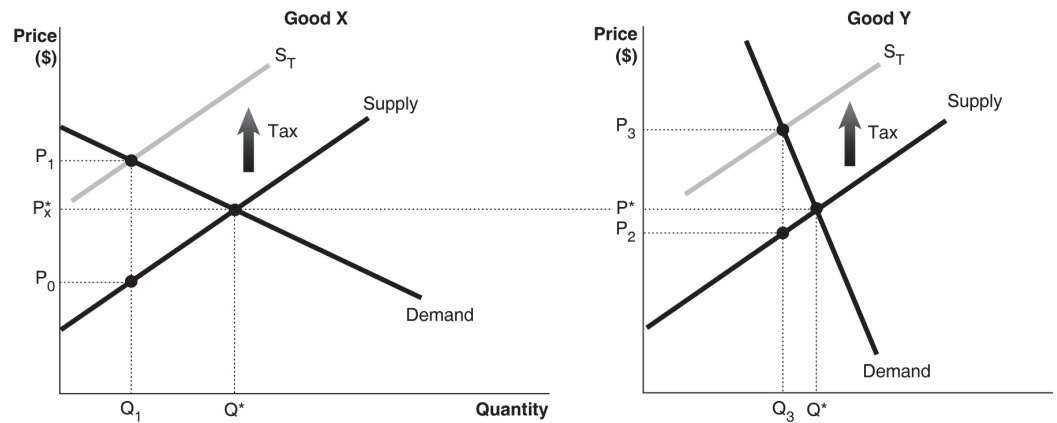
AACSB: Analytic thinking

Figure 4-11



- 29) Refer to Figure 4-11. The figure above illustrates the markets for two goods, Good X and Good Y. Suppose an identical dollar tax is imposed in each market.
- Compare the consumer burden and producer burden in each market. Illustrate your answer graphically.
  - If the goal of the government is to raise revenue with minimum impact to quantity consumed, in which market should the tax be imposed?
  - If the goal of the government is to discourage consumption, in which market should the tax be imposed?

Answer: a. See the figure below.



- The market for Good Y
- The market for Good X

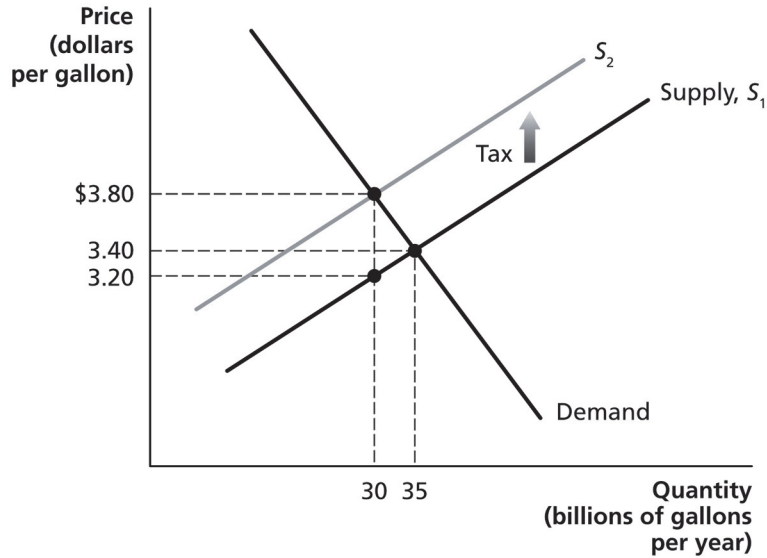
Diff: 3 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

Figure 4-12



30) Refer to Figure 4-12. The figure above represents demand and supply in the market for gasoline.

Use the diagram to answer the following questions.

- How much is the government tax on each gallon of gasoline?
- What portion of the unit tax is paid by consumers?
- What portion of the unit tax is paid by producers?
- What is the quantity sold after the imposition of the tax?
- What is the after-tax revenue per gallon received by producers?
- What is the total tax revenue collected by the government?
- What is the value of the excess burden of the tax?
- Is this gasoline tax efficient?

Answer: a. Tax = \$0.60 per gallon  
 b. Consumer burden = \$0.40  
 c. Producer burden = \$0.20  
 d. Quantity sold = 30 billion  
 e. Net Price to seller = \$3.20  
 f. Tax Revenue = \$18 billion ( $\$0.60 \times 30$  billion)  
 g. Excess burden (deadweight loss) = \$1.5 billion ( $\frac{1}{2} \times \$0.60 \times 5$  billion)  
 h. Yes, a tax is efficient if it imposes a small excess burden relative to the tax revenue it raises.

Diff: 2 Page Ref: 117

Topic: Tax Incidence

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking



## 4.5 Appendix: Quantitative Demand and Supply Analysis

- 1) The following equations represent the demand and supply for silver pendants.

$$Q_D = 50 - 2P$$

$$Q_S = -10 + 2P$$

What is the equilibrium price ( $P$ ) and quantity ( $Q$  - in thousands) of pendants?

A)  $P = \$15$ ;  $Q = 20$  thousand

B)  $P = \$50$ ;  $Q = 10$  thousand

C)  $P = \$20$ ;  $Q = 15$  thousand

D)  $P = \$10$ ;  $Q = 30$  thousand

Answer: A

Diff: 3 Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 2) The following equations represent the demand and supply for bottles of nail polish.

$$Q_D = 25 - P$$

$$Q_S = -15 + 3P$$

What is the equilibrium price ( $P$ ) and quantity ( $Q$  - in thousands) of bottles of nail polish?

A)  $P = \$5$ ;  $Q = 20$  thousand

B)  $P = \$15$ ;  $Q = 30$  thousand

C)  $P = \$20$ ;  $Q = 5$  thousand

D)  $P = \$10$ ;  $Q = 15$  thousand

Answer: D

Diff: 3 Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 3) If the price of hairspray is represented by equation
- $P = 10 - 0.2 Q_D$
- , then the corresponding quantity of hairspray demanded is represented by the equation

A)  $Q_D = 5P - 2$ .

B)  $Q_D = 0.5P + 2$ .

C)  $Q_D = 50 - 5P$ .

D)  $Q_D = -10 + 0.2P$ .

Answer: C

Diff: 1 Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 4) If the price of chewing gum is represented by equation
- $P = 25 - 0.5 Q_D$
- , then the corresponding quantity of chewing gum demanded is represented by the equation

A)  $Q_D = 2P - 0.5$ .

B)  $Q_D = 0.5P + 25$ .

C)  $Q_D = 50 - 2P$ .

D)  $Q_D = -5 + 10P$ .

Answer: C

Diff: 1 Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 5) If the quantity of fishing poles demanded is represented by the equation  $Q_D = 60 - P$  then the corresponding price of fishing poles is represented by the equation

A)  $P = 0.6Q_D + 10$ .                      B)  $P = 60 - Q_D$ .  
 C)  $P = -60 + Q_D$ .                      D)  $P = Q_D + 60$ .

Answer: B

Diff: 1      Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 6) If the quantity of soccer balls demanded is represented by the equation  $Q_D = 80 - 2P$  then the corresponding price of soccer balls is represented by the equation

A)  $P = 1.6Q_D + 80$ .                      B)  $P = 80 - Q_D$ .  
 C)  $P = 40 - 0.5Q_D$ .                      D)  $P = Q_D + 160$ .

Answer: C

Diff: 1      Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 7) If the quantity of donuts supplied is represented by the equation  $Q_S = -15 + 5P$  then the corresponding price of donuts is represented by the equation

A)  $P = 0.2Q_S + 3$ .                      B)  $P = 5Q_S + 75$ .                      C)  $P = Q_S - 7.5$ .                      D)  $P = 15 - 0.5Q_S$ .

Answer: A

Diff: 1      Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 8) If the quantity of sunglasses supplied is represented by the equation  $Q_S = -60 + 4P$  then the corresponding price of sunglasses is represented by the equation

A)  $P = 0.25Q_S + 15$ .                      B)  $P = 15Q_S + 240$ .  
 C)  $P = Q_S - 7.5$ .                      D)  $P = 12 - 0.4Q_S$ .

Answer: A

Diff: 1      Page Ref: 131-132

Topic: Demand and Supply Equations

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Table 4-6

Demand	Supply
$P = 80 - Q_D$	$P = 50 + 1/2 Q_S$
$Q_D = 80 - P$	$Q_S = 2P - 100$

- 9) Refer to Table 4-6. The equations above describe the demand and supply for Chef Ernie's Sushi-on-a-Stick. What are the equilibrium price and quantity (in thousands) for Chef Ernie's sushi?

A) \$80 and 80 thousand                      B) \$60 and 20 thousand  
 C) \$50 and 100 thousand                      D) \$40 and 50 thousand

Answer: B

Diff: 3 Page Ref: 131–132

Topic: Demand and Supply Equations

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 10) **Refer to Table 4–6.** The equations above describe the demand and supply for Chef Ernie's Sushi-on-a-Stick. The equilibrium price and quantity for Chef Ernie's sushi are \$60 and 20 thousand units. What is the value of consumer surplus?
- A) \$100 thousand      B) \$200 thousand      C) \$600 thousand      D) \$800 thousand

Answer: B

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 11) **Refer to Table 4–6.** The equations above describe the demand and supply for Chef Ernie's Sushi-on-a-Stick. The equilibrium price and quantity for Chef Ernie's sushi are \$60 and 20 thousand units. What is the value of producer surplus?
- A) \$100 thousand      B) \$200 thousand      C) \$600 thousand      D) \$800 thousand

Answer: A

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 12) **Refer to Table 4–6.** The equations above describe the demand and supply for Chef Ernie's Sushi-on-a-Stick. The equilibrium price and quantity for Chef Ernie's sushi are \$60 and 20 thousand units. What is the value of economic surplus in this market?
- A) \$300 thousand      B) \$600 thousand  
C) \$1,200 thousand      D) \$1,600 thousand

Answer: A

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

**Table 4.7**

Demand	Supply
$P = 50 - 2Q_D$	$P = 35 + Q_S$
$Q_D = 25 - 0.5P$	$Q_S = P - 35$

- 13) **Refer to Table 4–7.** The equations above describe the demand and supply for Bubba's Fried Jellybeans. What are the equilibrium price and quantity (in thousands) for Bubba's Fried Jellybeans?
- A) \$80 and 40 thousand      B) \$60 and 10 thousand  
C) \$20 and 20 thousand      D) \$40 and 5 thousand

Answer: D

Diff: 3 Page Ref: 131–132

Topic: Demand and Supply Equations

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 14) **Refer to Table 4–7.** The equations above describe the demand and supply for Bubba's Fried Jellybeans. The equilibrium price and quantity for Bubba's Fried Jellybeans are \$40 and 5 thousand units. What is the value of consumer surplus?
- A) \$5 thousand      B) \$12.5 thousand      C) \$25 thousand      D) \$37.5 thousand

Answer: C

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 15) **Refer to Table 4–7.** The equations above describe the demand and supply for Bubba's Fried Jellybeans. The equilibrium price and quantity for Bubba's Fried Jellybeans are \$40 and 5 thousand units. What is the value of producer surplus?
- A) \$5 thousand      B) \$12.5 thousand      C) \$25 thousand      D) \$37.5 thousand

Answer: B

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 16) **Refer to Table 4–7.** The equations above describe the demand and supply for Bubba's Fried Jellybeans. The equilibrium price and quantity for Bubba's Fried Jellybeans are \$40 and 5 thousand units. What is the value of economic surplus in this market?
- A) \$5 thousand      B) \$12.5 thousand      C) \$25 thousand      D) \$37.5 thousand

Answer: D

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 17) You are given the following market data for Venus automobiles in Saturnia.

Demand:  $P = 200 - 0.25Q$

Supply:  $P = 130 + 0.10Q$

where  $P$  = Price and  $Q$  = Quantity.

- Calculate the equilibrium price and quantity.
- Calculate the consumer surplus in this market.
- Calculate the producer surplus in this market.

Answer: a. Price = \$150; Quantity = 200

b. Consumer surplus = \$5,000

c. Producer Surplus = \$2,000

Diff: 3 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

18) The demand and supply equations for the apple market are:

$$\text{Demand: } P = 12 - 0.01Q$$

$$\text{Supply: } P = 0.02Q$$

where  $P$  = price per bushel, and  $Q$  = quantity.

- a. Calculate the equilibrium price and quantity.
- b. Suppose the government guaranteed producers a price of \$10 per bushel. What would be the effect on quantity supplied? Provide a numerical value.
- c. By how much would the \$10 price change the quantity of apples demanded? Provide a numerical value.
- d. Would there be a shortage or surplus of apples?
- e. What is the size of this shortage or surplus? Provide a numerical value.

Answer: a.  $Q = 400$  bushels,  $P = \$8$ .

b. Quantity supplied would increase to 500 bushels.

c. Quantity demanded would fall to 200 bushels.

d. There would be a surplus.

e. Surplus = 300 bushels.

Diff: 2 Page Ref: 132–134

Topic: Calculating Surplus

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

# Chapter 5

## Externalities, Environmental Policy, and Public Goods

### 5.1 Externalities and Economic Efficiency

- 1) When the federal government orders firms to use particular methods to reduce pollution, it is said to be using

A) command-and-control policies.                      B) strong-arm tactics.  
C) global initiatives.                                      D) market-based policies.

Answer: A

Diff: 1      Page Ref: 137

Topic: Cap-and-Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 2) A carbon tax which is designed to reduce pollution is an example of a

A) command-and-control policy.                      B) government administrative rule.  
C) noneffective incentive.                              D) market-based policy.

Answer: D

Diff: 1      Page Ref: 137

Topic: Cap-and-Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 3) Conceptually, the efficient level of carbon emissions is the level for which

A) the marginal benefit of reducing carbon emissions is maximized.  
B) the marginal cost of reducing carbon emissions is minimized.  
C) the marginal benefit of reducing carbon emissions is equal to the cost of reducing carbon emissions.  
D) the marginal benefit of reducing carbon emissions is minimized and the marginal cost of reducing carbon emissions is maximized.

Answer: C

Diff: 1      Page Ref: 137

Topic: Cap-and-Trade

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 4) An externality is

A) a benefit realized by the purchaser of a good or service.  
B) a cost paid for by the producer of a good or service.  
C) a benefit or cost experienced by someone who is not a producer or consumer of a good or service.  
D) anything that is external or not relevant to the production of a good or service.

Answer: C

*Diff: 1 Page Ref: 138*

*Topic: Externalities*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

5) Which of the following is a source of market failure?

- A) unforeseen circumstances which leads to the bankruptcy of many firms
- B) a lack of government intervention in a market
- C) incomplete property rights or inability to enforce property rights
- D) an inequitable income distribution

Answer: C

*Diff: 2 Page Ref: 140*

*Topic: Market Failure*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

6) What is a market failure?

- A) It refers to the inability of the market to allocate resources efficiently up to the point where marginal social benefit equals marginal social cost.
- B) It refers to the inability of the market to allocate resources efficiently up to the point where marginal social benefit equals marginal private cost.
- C) It refers to a situation where an entire sector of the economy (for example, the airline industry) collapses because of some unforeseen event.
- D) It refers to a breakdown in a market economy because of widespread corruption in government.

Answer: A

*Diff: 1 Page Ref: 140*

*Topic: Market Failure*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

7) What are property rights?

- A) the title to ownership of any physical asset
- B) a legal document verifying ownership of intangible assets
- C) the rights individuals or firms have to the exclusive use of their property, including the right to buy or sell it
- D) the right of the government to appropriate private assets for the good of society

Answer: C

*Diff: 1 Page Ref: 140*

*Topic: Property Rights*

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

*AACSB: Analytic thinking*

- 8) Which of the following activities create a negative externality?
- A) cleaning up the sidewalk on your block
  - B) graduating from college
  - C) repainting the house you live in to improve its appearance
  - D) keeping a junked car parked on your front lawn

Answer: D

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 9) A negative externality exists if
- A) there are price controls in a market.
  - B) there are quantity controls in a market.
  - C) the marginal social cost of producing a good or service exceeds the private cost.
  - D) the marginal private cost of producing a good or service exceeds the social cost.

Answer: C

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 10) Which of the following represents the true economic cost of production when firms produce goods that cause negative externalities?
- A) the private cost of production
  - B) the social cost of production
  - C) the external cost of production
  - D) the explicit cost of production

Answer: B

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 11) Private costs
- A) are borne by producers of a good while social costs are borne by government.
  - B) are borne by consumers of a good while social costs are borne by government.
  - C) are borne by producers of a good while social costs are borne by society at large.
  - D) are borne by producers of a good while social costs are borne by those who cannot afford to purchase the good.

Answer: C

Diff: 2 Page Ref: 138

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 12) What is a "social cost" of production?
- A) the cost of the natural resources used up in production
  - B) the total costs of producing a product, both implicit and explicit costs
  - C) the sum of all costs to individuals in society, regardless of whether the costs are borne by those who produce the products or consume the product
  - D) the cost of the environmental damage created by production

Answer: C



Diff: 2 Page Ref: 139

Topic: Social Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 13) If you burn your trash in the back yard in spite of regulations against it, then you are
- A) acting economically irrationally and creating a social cost.
  - B) avoiding the private costs associated with disposing your trash some other way and creating a social cost.
  - C) acting rationally and creating a positive externality.
  - D) saving landfill space and creating a social benefit.

Answer: B

Diff: 2 Page Ref: 138

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 14) Which of the following is an example of a positive externality?
- A) banning the sale of candy in elementary schools
  - B) planting trees along a sidewalk which add beauty and creates shade
  - C) forbidding the use of cell phones in public
  - D) prohibit street parking in all residential neighborhoods

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 15) A positive externality causes
- A) the marginal social benefit to be equal to the marginal private cost of the last unit produced.
  - B) the marginal social benefit to be less than the marginal private cost of the last unit produced.
  - C) the marginal social benefit to exceed the marginal private cost of the last unit produced.
  - D) the marginal private benefit to exceed the marginal social cost of the last unit produced.

Answer: C

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 16) When a negative externality exists, the private market produces
- A) more than the economically efficient output level.
  - B) less than the economically efficient output level.
  - C) products at a low opportunity cost.
  - D) products at a high opportunity cost.

Answer: A

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

17) Mandatory motorcycle helmet laws are designed to reduce the severity of injuries resulting from motorcycle involvement in traffic accidents. In this sense, these mandatory helmet laws are reducing \_\_\_\_\_ of risky behavior.

- A) positive externalities  
B) negative externalities  
C) the private benefit  
D) the social benefit

Answer: B

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-1

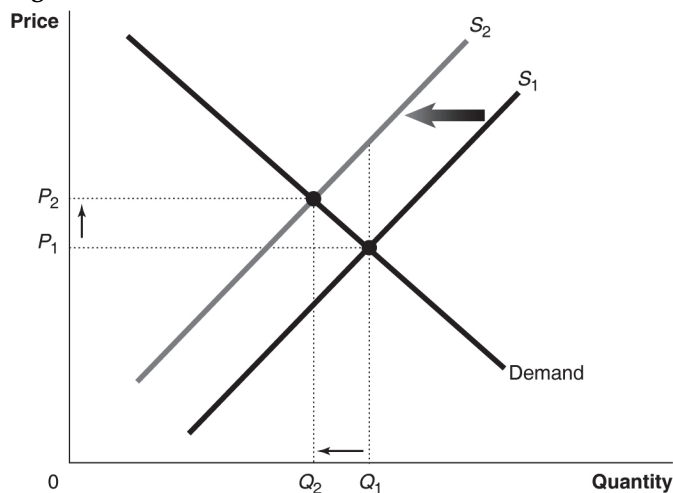


Figure 5-1 shows a market with an externality. The current market equilibrium output of  $Q_1$  is not the economically efficient output. The economically efficient output is  $Q_2$ .

18) Refer to Figure 5-1. Suppose the current market equilibrium output of  $Q_1$  is not the economically efficient output because of an externality. The economically efficient output is  $Q_2$ .

In that case, the diagram shows

- A) the effect of a positive externality in the production of a good.  
B) the effect of a negative externality in the production of a good.  
C) the effect of an external cost imposed on a producer.  
D) the effect of an external benefit such as a subsidy granted to consumers of a good.

Answer: B

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

19) Refer to Figure 5-1. If, because of an externality, the economically efficient output is  $Q_2$  and not the current equilibrium output of  $Q_1$ , what does  $S_1$  represent?

- A) the market supply curve reflecting external cost  
B) the market supply curve reflecting implicit cost  
C) the market supply curve reflecting social cost  
D) the market supply curve reflecting private cost

Answer: D

Diff: 2 Page Ref: 139

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

20) Refer to Figure 5-1. If, because of an externality, the economically efficient output is  $Q_2$  and not the current equilibrium output of  $Q_1$ , what does  $S_2$  represent?

- A) the market supply curve reflecting private cost
- B) the market supply curve reflecting social cost
- C) the market supply curve reflecting external cost
- D) the market supply curve reflecting implicit cost

Answer: B

Diff: 2 Page Ref: 139

Topic: Social Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-2

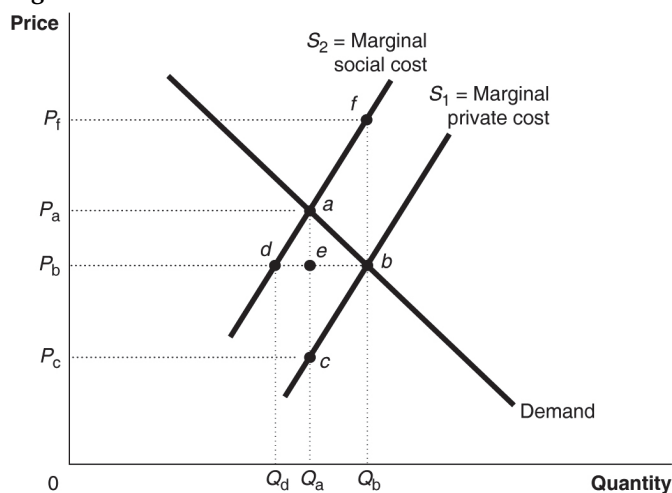


Figure 5-2 shows a market with a negative externality.

21) Refer to Figure 5-2. The efficient output level is

- A)  $Q_d$ .
- B)  $Q_b$ .
- C)  $Q_a$ .
- D)  $Q_b - Q_d$ .

Answer: C

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

22) **Refer to Figure 5–2.** The private profit maximizing quantity for the firm is

- A)  $Q_a$ .                      B)  $Q_b$ .                      C)  $Q_b - Q_d$ .                      D)  $Q_d$ .

Answer: B

Diff: 2      Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

23) **Refer to Figure 5–2.** The deadweight loss due to the externality is represented by the area

- A)  $abc$ .                      B)  $abf$ .                      C)  $abd$ .                      D)  $ade$ .

Answer: B

Diff: 3      Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

24) **Refer to Figure 5–2.** The size of marginal external costs can be determined by

- A)  $S_2 + S_1$  at each output level.                      B)  $S_2 - S_1$  at each output level.  
C) the supply curve  $S_2$ .                      D) the supply curve  $S_1$ .

Answer: B

Diff: 3      Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

25) **Refer to Figure 5–2.** The marginal benefit of the last unit produced is represented by the price

- A)  $P_a$ .                      B)  $P_b$ .                      C)  $P_c$ .                      D)  $P_f$ .

Answer: B

Diff: 2      Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

26) **Refer to Figure 5–2.** The true marginal cost of the last unit produced is represented by the price

- A)  $P_a$ .                      B)  $P_b$ .                      C)  $P_c$ .                      D)  $P_f$ .

Answer: D

Diff: 2      Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro–2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 27) A market supply curve reflects the
- A) external costs of producing a good or service.
  - B) external benefits of producing a good or service.
  - C) social costs of producing a good or service.
  - D) private costs of producing a good or service.

Answer: D

Diff: 2 Page Ref: 139

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 28) Which of the following conditions holds in an economically efficient competitive market equilibrium?
- A) The deadweight loss is positive but at a minimum.
  - B) Producer and consumer surplus are exactly equal in size.
  - C) There are no positive and no negative external effects from consumption and production.
  - D) The marginal benefit of the last unit produced and consumed is maximized.

Answer: C

Diff: 2 Page Ref: 139

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 29) A market demand curve reflects the
- A) private benefits of consuming a product.
  - B) external benefits of consuming a product.
  - C) social benefits of consuming a product.
  - D) the sum of private and social benefits of consuming a product.

Answer: A

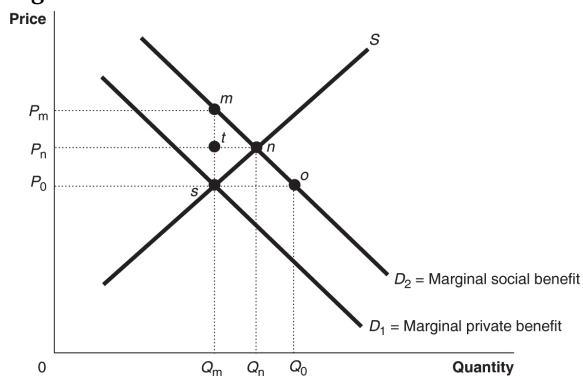
Diff: 2 Page Ref: 139

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

Figure 5-3



- 30) Refer to Figure 5-3. The efficient output level is
- A)  $Q_m$ .
  - B)  $Q_n$ .
  - C)  $Q_o$ .
  - D)  $Q_o - Q_m$ .

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 31) **Refer to Figure 5-3.** The private profit maximizing output level is
- A)  $Q_m$ .                      B)  $Q_n$ .                      C)  $Q_o$ .                      D)  $Q_o - Q_m$ .

Answer: A

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 32) **Refer to Figure 5-3.** The size of marginal external benefits can be determined by
- A) the demand curve  $D_2$ .                      B)  $D_2 + D_1$  at each output level  
C)  $D_2 - D_1$  at each output level.                      D) the demand curve  $D_1$ .

Answer: C

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 33) **Refer to Figure 5-3.** In the absence of any government intervention, the private market
- A) under produces by  $Q_o - Q_m$  units.                      B) over produces by  $Q_o - Q_m$  units.  
C) over produces by  $Q_n - Q_m$  units.                      D) under produces by  $Q_n - Q_m$  units.

Answer: D

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 34) **Refer to Figure 5-3.** The deadweight loss due to the externality is represented by the area
- A)  $mso$ .                      B)  $msn$ .                      C)  $nso$ .                      D)  $mtn$ .

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 35) **Refer to Figure 5-3.** At the competitive market equilibrium, for the last unit produced
- A) the size of the external cost is  $P_m - P_o$ .  
B) the size of the external benefit is  $P_m - P_o$ .  
C) the size of the external cost is  $P_n - P_o$ .  
D) the size of the external benefit is  $P_n - P_o$ .

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

36) Pollution is an example of a

- A) public good.
- B) positive externality.
- C) private cost.
- D) negative externality

Answer: D

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

37) Which of the following would result in a positive externality?

- A) A local government establishes a price ceiling on rental apartments.
- B) An electric utility burns coal that causes acid rain.
- C) Medical research results in a cure for malaria.
- D) McDonald's adds new fat-free items to its menu.

Answer: C

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

38) In the past the federal government often employed what is called a "command and control" approach to the reduction of pollution emissions. Many economists are critical of this approach because

- A) it does not lead to significant reductions in pollution.
- B) they believe a market-based approach will reduce pollution more efficiently.
- C) the "command and control" approach is designed to help firms at the expense of consumers.
- D) the "command and control" approach leads to negative externalities.

Answer: B

Diff: 1 Page Ref: 137

Topic: Command and Control Approach

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

39) A positive externality results when

- A) economists are sure that a good or service provides benefits to consumers.
- B) someone pays for a good or service even though she is not directly affected by the production or consumption of it.
- C) when people who live in one country benefit from the production of a good or service that occurs in another country.
- D) people who are not directly involved in producing or paying for a good or service benefit from it.

Answer: D

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 40) Which of the following describes how a negative externality affects a competitive market?
- A) The externality causes a difference between the private cost of production and the social cost.
  - B) The externality causes a difference between the private cost of production and the private benefit from consumption.
  - C) The externality causes consumer surplus to exceed producer surplus.
  - D) The externality causes a difference between the private cost of production and the equilibrium price.

Answer: A

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 41) A free market fails when
- A) there is government intervention.
  - B) there is an external effect in either production, consumption, or both.
  - C) firms that produce goods which create positive externalities go bankrupt.
  - D) firms that produce goods which create negative externalities earn high profits.

Answer: B

Diff: 1 Page Ref: 140

Topic: Market Failure

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 42) Which of the following could be evidence of a market failure?
- A) Resources in an economy are not fully utilized.
  - B) The market price of a product is above the average cost of production.
  - C) There are only a handful of firms competing against each other in an industry.
  - D) Market prices do not reflect true production costs.

Answer: D

Diff: 2 Page Ref: 140

Topic: Market Failure

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 43) Alternative approaches for reducing carbon dioxide emissions are
- A) carbon taxes and carbon scrubbing.
  - B) carbon trading and carbon subsidies.
  - C) carbon taxes and carbon trading.
  - D) burning low carbon coal and deforestation.

Answer: C

Diff: 2 Page Ref: 137

Topic: Cap-and-Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking



- 44) Which of the following describes how a positive externality affects a competitive market?
- A) The externality causes a difference between the private benefit from consumption and the social benefit.
  - B) The externality causes a difference between the private benefit from production and the social cost of production.
  - C) The externality causes quantity demanded to exceed quantity supplied.
  - D) The externality causes a difference between the social cost of production and the social cost of consumption.

Answer: A

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 45) "A competitive market achieves economic efficiency by maximizing the sum of consumer surplus and producer surplus." This statement
- A) is true only if there are positive externalities in production in the market.
  - B) is true only if there are no negative externalities in the market.
  - C) is true only if there are no positive or negative externalities in the market.
  - D) is true in theory, but economic efficiency cannot be achieved in a real market.

Answer: C

Diff: 2 Page Ref: 138

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 46) If there are no externalities a competitive market achieves economic efficiency. If there is a negative externality, economic efficiency will not be achieved because
- A) too little of the good will be produced.
  - B) too much of the good will be produced.
  - C) a deadweight loss will occur that is equal to the area under the demand curve for the good.
  - D) economic surplus is maximized.

Answer: B

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 47) When there is a negative externality, the private cost of production \_\_\_\_\_ the social cost of production.

A) is greater than      B) is equal to      C) eliminates      D) is less than

Answer: D

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

48) When there is a positive externality

- A) the private benefit received by consumers is greater than the external benefit.
- B) the social benefit received by consumers is greater than the private benefit.
- C) the private benefit received by consumers is greater than the private cost.
- D) the private benefit received by consumers is greater than the social benefit.

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

49) When production generates a negative externality, the true cost of production is the

- A) private cost of production.
- B) public cost of production.
- C) social cost of production.
- D) average cost of production.

Answer: C

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

50) If the social cost of producing a good or service exceeds the private cost

- A) a positive externality exists.
- B) the sum of consumer surplus and producer surplus is maximized.
- C) the market achieves economic efficiency.
- D) a negative externality exists.

Answer: D

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

51) The cost borne by a producer in the production of a good or service is called

- A) private cost.
- B) public cost.
- C) social cost.
- D) internal cost.

Answer: A

Diff: 1 Page Ref: 138

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

52) If the social benefit of consuming a good or a service exceeds the private benefit

- A) a negative externality exists.
- B) the market achieves economic efficiency.
- C) a positive externality exists.
- D) the sum of consumer surplus and producer surplus is maximized.

Answer: C

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 53) An external cost is created when you
- A) graduate from college.
  - B) buy flowers for your mother on Mother's Day.
  - C) litter on the side of the road.
  - D) buy a sandwich for lunch.

Answer: C

Diff: 1 Page Ref: 138

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 54) When there is an externality in a market
- A) the externality will move the market to an economically efficient equilibrium.
  - B) the externality will cause the market price to be less than or greater than the equilibrium price.
  - C) the government should use price controls to enable the market to reach equilibrium.
  - D) government intervention may increase economic efficiency.

Answer: D

Diff: 2 Page Ref: 138

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 55) The social cost of cutting trees for firewood in a government forest is
- A) the increased likelihood of flooding as more trees are cut.
  - B) the increased likelihood of flooding as more trees are cut plus the private cost of cutting the trees.
  - C) opportunity cost to the individual of cutting the wood.
  - D) the marginal costs of cutting the last tree.

Answer: B

Diff: 2 Page Ref: 139

Topic: Social Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 56) Assume that emissions from electric utilities contribute to pollution in the form of acid rain. Which of the following describes how this affects the market for electricity?
- A) The equilibrium in the market is not efficient; the marginal benefit from electricity is greater than the marginal social cost.
  - B) A deadweight loss occurs; at equilibrium the additional social cost of production is greater than the additional benefit to consumers.
  - C) The equilibrium in the market is not efficient; because of the cost of the acid rain, economic efficiency would be greater if more electricity were produced.
  - D) The equilibrium in the market is not efficient; consumer surplus is equal to producer surplus.

Answer: B

Diff: 2 Page Ref: 139

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

57) Medical research that ends in a cure for a serious disease produces positive externalities. What is the impact of this positive externality on economic efficiency?

- A) At equilibrium, less than the economically efficient quantity of medical research is produced.
- B) A deadweight loss occurs because at equilibrium the marginal social cost of medical research is greater than the marginal social benefit.
- C) At equilibrium, more than the economically efficient quantity of medical research is produced.
- D) A deadweight loss occurs because at equilibrium the marginal social cost equals the marginal social benefit.

Answer: A

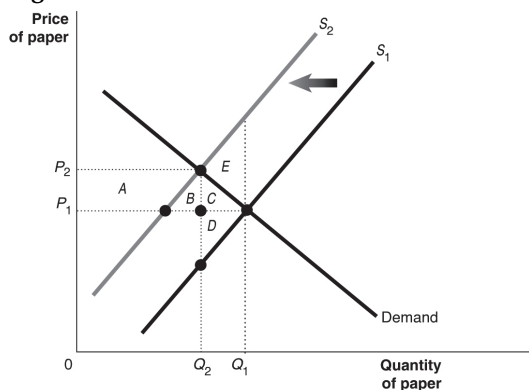
Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

**Figure 5-4**



Suppose there are several paper mills producing paper for a market. These mills, located upstream from a fishing village, discharge a large amount of wastewater into the river. The waste material affects the number of fish in the river, and the use of the river for recreation and as a public water supply source. Figure 5-4 shows the paper market. Use this Figure to answer the following question(s).

58) Refer to Figure 5-4. What does  $S_1$  represent?

- A) the market supply curve that reflects social cost
- B) the market supply curve that reflects only external cost
- C) the market supply curve that reflects only private benefit
- D) the market supply curve that reflects private cost

Answer: D

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

59) **Refer to Figure 5-4.** What does  $S_2$  represent?

- A) the market supply curve that reflects social cost
- B) the market supply curve that reflect private cost
- C) the market supply curve that reflects external cost
- D) the market supply curve that reflects social benefit

Answer: A

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

60) **Refer to Figure 5-4.** What is the economically efficient output level?

- A)  $Q_1$
- B)  $Q_2$  minus  $Q_1$
- C)  $Q_2$
- D)  $Q_1$  plus  $Q_2$

Answer: C

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

61) **Refer to Figure 5-4.** What is the deadweight loss from producing at the market equilibrium?

- A) area C
- B) area E
- C) area D
- D) area F

Answer: B

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

62) **Refer to Figure 5-4.** Why is there a deadweight loss?

- A) because the marginal social cost of producing each additional unit in excess of  $Q_2$  exceeds the marginal benefit
- B) because the marginal private cost of producing each additional unit in excess of  $Q_2$  exceeds the marginal benefit
- C) because the marginal social benefit of producing each additional unit in excess of  $Q_2$  exceeds the private cost
- D) because the marginal private benefit of producing each additional unit in excess of  $Q_2$  exceeds the social cost

Answer: A

Diff: 3 Page Ref: 139

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-5

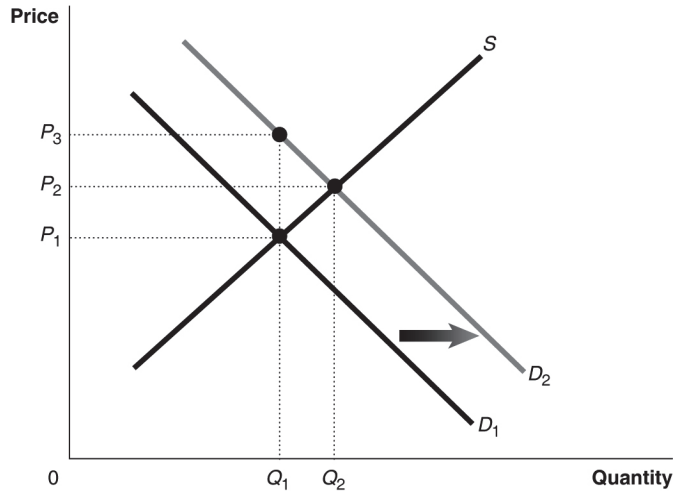


Figure 5-5 shows a market with an externality. The current market equilibrium output of  $Q_1$  is not the economically efficient output. The economically efficient output is  $Q_2$ .

- 63) Refer to Figure 5-5. Suppose the current market equilibrium output of  $Q_1$  is not the economically efficient output because of an externality. The economically efficient output is  $Q_2$ .

In that case, diagram shows

- A) the effect of a subsidy granted to producers of a good.
- B) the effect of an excess demand in a market.
- C) the effect of a positive externality in the consumption of a good.
- D) the effect of a negative externality in the consumption of a good.

Answer: C

Diff: 2 Page Ref: 140

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 64) Refer to Figure 5-5. If, because of an externality, the economically efficient output is  $Q_2$  and not the current equilibrium output of  $Q_1$ , what does  $D_1$  represent?

- A) the demand curve reflecting external benefits
- B) the demand curve reflecting social benefits
- C) the demand curve reflecting private benefits
- D) the demand curve reflecting the sum of private and social benefits

Answer: C

Diff: 2 Page Ref: 140

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

65) Refer to Figure 5-5. If, because of an externality, the economically efficient output is  $Q_2$  and not the current equilibrium output of  $Q_1$ , what does  $D_2$  represent?

- A) the demand curve reflecting external benefits
- B) the demand curve reflecting social benefits
- C) the demand curve reflecting private benefits
- D) the demand curve reflecting the sum of social and external benefits

Answer: B

Diff: 2 Page Ref: 140

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-6



Figure 5-6 shows the market for measles vaccinations, a product whose use generates positive externalities.

66) Refer to Figure 5-6. What does  $D_1$  represent?

- A) the demand curve reflecting social benefit
- B) the positive externalities curve
- C) the demand curve reflecting private benefit
- D) the social welfare curve

Answer: C

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

67) Refer to Figure 5-6. What is the economically efficient output level?

- A)  $Q_1$
- B)  $Q_1 + Q_2$
- C)  $Q_2 - Q_1$
- D)  $Q_2$

Answer: D

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

68) Refer to Figure 5–6. What does  $D_2$  represent?

- A) the social welfare curve
- B) the demand curve reflecting social benefit
- C) the demand curve reflecting private benefit
- D) the positive externalities curve

Answer: B

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

69) Refer to Figure 5–6. What is the market equilibrium output level?

- A)  $Q_1$
- B)  $Q_2$
- C)  $Q_1 + Q_2$
- D)  $Q_2 - Q_1$

Answer: A

Diff: 1 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

70) Refer to Figure 5–6. What is the deadweight loss resulting from producing at the market equilibrium?

- A)  $B + C$
- B)  $E + C$
- C)  $F$
- D)  $C$

Answer: B

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

71) Refer to Figure 5–6. Why is there a deadweight loss?

- A) because the marginal private benefit for each additional unit between  $Q_1$  and  $Q_2$  exceeds the marginal cost
- B) because the marginal private cost for each additional unit between  $Q_1$  and  $Q_2$  exceeds the marginal private benefit
- C) because the marginal social cost for each additional unit between  $Q_1$  and  $Q_2$  exceeds the marginal social benefit
- D) because the marginal social benefit for each additional unit between  $Q_1$  and  $Q_2$  exceeds the marginal cost

Answer: D

Diff: 3 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

### Article Summary

According to a study by the Center for Neighborhood Technology, homes located within one -half mile of frequently-used public transportation held their value much better during the recent housing market downturn than did those without easy access to public transportation, and the greater home values reflect greater demand for neighborhoods in close proximity to public transportation. In addition to higher home values, the study found that close proximity to public transportation offers lower transportation costs, a wider variety of travel options, and access to more employment opportunities.



**Source:** Meg Handley, "Study: Proximity to Public Transit Boosts Home Values," *U.S. News & World Report*, March 22, 2013.

- 72) ***Refer to the Article Summary.*** Higher home values which result from close proximity to public transportation are an example of a \_\_\_\_\_ due to the public transportation.
- A) positive externality.  
B) negative externality.  
C) private cost.  
D) social cost.

Answer: A

Diff: 2      Page Ref: 140

Topic: Positive Externality

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

AACSB: Analytic thinking

- 73) **Refer to the Article Summary.** People who do not use public transportation can still benefit from it, as is shown by the higher home values. As a result, the marginal social benefit from public transportation is \_\_\_\_\_ the marginal private benefit to those who use public transportation.
- A) equal to                      B) greater than                      C) less than                      D) unrelated to

Answer: B

Diff: 2      Page Ref: 140

Topic: Positive Externality

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

AACSB: Analytic thinking

- 74) An externality refers to economic events outside a market.

Answer: FALSE

Diff: 1      Page Ref: 138

Topic: Externalities

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

AACSB: Analytic thinking

- 75) The private cost of a good or service is the cost borne by the producer.

Answer: TRUE

Diff: 2      Page Ref: 138

Topic: Private Cost

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 76) A market failure arises when an entire sector of the economy (for example, the airline industry) collapses because of some unforeseen event.

Answer: FALSE

Diff: 1      Page Ref: 140

Topic: Market Failure

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

AACSB: Analytic thinking

- 77) When there is a positive externality in a free market, too much of the good is produced and consumed.

Answer: FALSE

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 78) When there is a negative externality, the competitive output is more than the economically efficient output level.

Answer: TRUE

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 79) The social cost of a good or service is the cost borne by the producer.

Answer: FALSE

Diff: 2 Page Ref: 139

Topic: Social Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 80) An externality is an example of a market failure.

Answer: TRUE

Diff: 1 Page Ref: 140

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 81) When products that create positive externalities are produced, at the market equilibrium output, the social benefit generated by consuming the product exceeds the private benefit.

Answer: TRUE

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 82) An external benefit is created when you pursue a college education.

Answer: TRUE

Diff: 1 Page Ref: 138

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 83) When negative externalities exist, the competitive market supply curve does not include all of the costs borne by members of society.

Answer: TRUE

Diff: 1 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 84) What is an externality?

Answer: An externality is a benefit or cost that affects someone who is not directly involved in the production or consumption of a good or service.

Diff: 2 Page Ref: 138

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 85) What is a private cost of production? What is a social cost of production? When is the private cost of production equal to the social cost of production?

Answer: Private cost of production is the cost borne by the producer of a good or service. Social cost of production is the total cost of producing a good or service, including both the private cost and any external cost. The private cost and the social cost are equal when no externalities exist.

Diff: 2 Page Ref: 138–139

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 86) How does a negative externality in production reduce economic efficiency?

Answer: If there is a negative externality in production, consumers not directly involved in the consumption of the product pay some of the external cost of producing the product. Since the producer does not bear the entire cost of production, the producer's marginal cost of production (the supply) is reduced. This encourages the producer to produce more of the product, leading to a market equilibrium which is greater than the efficient equilibrium and resulting in a deadweight loss.

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 87) Explain how mandatory seat belt laws may reduce the negative externalities of risky behavior.

Answer: Mandatory seat belt laws are designed to reduce the severity of injuries resulting from traffic accidents. By requiring all passengers in a vehicle to wear seat belts, the chances of serious injury are smaller, even when other drivers engage in risky behavior like speeding or reckless driving.

Diff: 2 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

88) What is a private benefit from consumption? What is a social benefit from consumption? When is the private benefit from consumption equal to the social benefit from consumption?

Answer: Private benefit from consumption is the benefit received from the consumer of a good or service. Social benefit from consumption is the total benefit from consuming a good or service, including both the private benefit and any external benefit. The private benefit and the social benefit are equal when no externalities exist.

Diff: 2 Page Ref: 139

Topic: Private Cost

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

89) A negative externality is an example of market failure. The root of the problem lies in the definition and enforcement of property rights. Explain.

Answer: If harmed parties do not have rights or have rights that are not enforced or weakly enforced, producers can make choices that impose costs on others and do not have to bear the full cost of their actions. This creates a discrepancy between the private cost of production and the social cost of production, the true cost of production being the social cost. Since the private cost is less than the social cost, firms will produce more than the economically efficient output level, resulting in a market failure. (Students can also explain using positive externalities.)

Diff: 3 Page Ref: 139

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

90) How does a positive externality in consumption reduce economic efficiency?

Answer: If there is a positive externality in consumption, people not directly involved in the consumption of the product capture some of the external benefits of the product being consumed. Since the consumer does not reap the entire benefit of consumption, the consumer's marginal benefit of consumption (the demand) is reduced. This results in the consumer consuming less of the product, leading to a market equilibrium which is less than the efficient equilibrium and resulting in a deadweight loss.

Diff: 2 Page Ref: 140

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

## 5.2 Private Solutions to Externalities: The Coase Theorem

1) In economics, the optimal level of pollution is

- A) zero.
- B) the level for which the total benefit from reducing the pollution is the greatest.
- C) the level for which the marginal benefit from reducing the pollution is the greatest.
- D) the level for which the net benefit from reducing the pollution is the greatest.

Answer: D

Diff: 2 Page Ref: 145

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 2) Economists argue that the level of pollution should be
- A) reduced completely to zero because by definition, it is a negative external effect.
  - B) ignored because it has always been present since the beginning of history.
  - C) reduced to the point where the marginal benefit of pollution reduction is equal to the marginal cost of pollution reduction to society.
  - D) best determined by elected officials who can speak on behalf of the public.

Answer: C

Diff: 2 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 3) Because producers do not bear the external cost of pollution
- A) the economically efficient level of production is achieved.
  - B) private production is below the economically efficient level.
  - C) private production exceeds the economically efficient level.
  - D) the market price is too high.

Answer: C

Diff: 2 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 4) If there is pollution in producing a product, then the market equilibrium price
- A) is too high and equilibrium quantity is too low.
  - B) and equilibrium quantity are too low.
  - C) and equilibrium quantity are too high.
  - D) is too low and equilibrium quantity is too high.

Answer: D

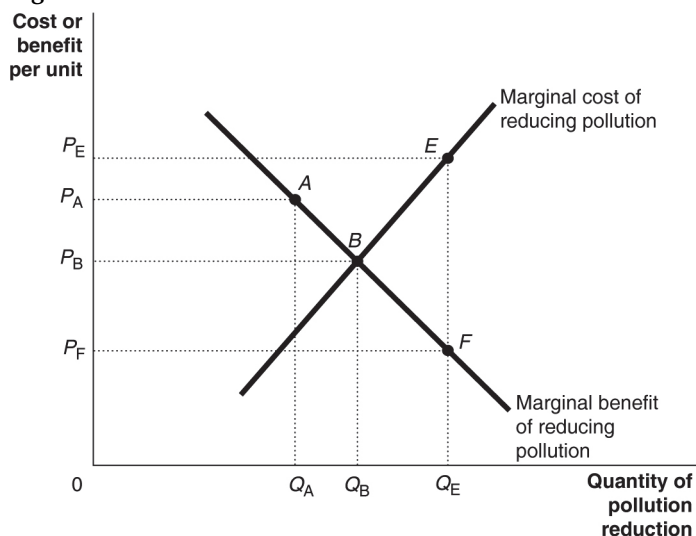
Diff: 2 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5–7



- 5) **Refer to Figure 5-7.** The marginal cost of reducing pollution curve is the same curve as
- A) the supply of pollution reduction curve.
  - B) the demand for pollution reduction curve.
  - C) the negative externality curve.
  - D) the value of pollution reduction curve.

Answer: A

Diff: 2 Page Ref: 143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 6) **Refer to Figure 5-7.** The marginal benefit of reducing pollution curve is the same curve as
- A) the supply of pollution reduction curve.
  - B) the demand for pollution reduction curve.
  - C) the positive externality curve.
  - D) the external benefit curve.

Answer: B

Diff: 2 Page Ref: 143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 7) **Refer to Figure 5-7.** What is the incremental cost of increasing the quantity of pollution reduction from  $Q_B$  to  $Q_E$  units?
- A)  $P_E$
  - B) the value of the area  $Q_BBEQ_E$
  - C)  $P_E \times Q_E$
  - D) the value of the area  $BEF$

Answer: B

Diff: 2 Page Ref: 143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 8) **Refer to Figure 5-7.** What is the incremental benefit of increasing the quantity of pollution reduction from  $Q_B$  to  $Q_E$  units?
- A)  $P_F$
  - B)  $P_F \times Q_E$
  - C) the value of the area  $BEF$
  - D) the value of the area  $Q_BBFQ_E$

Answer: D

Diff: 2 Page Ref: 143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 9) **Refer to Figure 5-7.** Which of the following statements is *true*?
- A) At  $Q_E$  the benefits of reducing pollution outweighs the cost of pollution reduction.
  - B) At  $Q_B$  society is under allocating resources to pollution reduction.
  - C) The optimal quantity of pollution reduction is  $Q_B$ .
  - D) The optimal quantity of pollution reduction is  $Q_E$ .

Answer: C

Diff: 2 Page Ref: 143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

10) The Coase theorem states that

- A) government intervention is always needed if externalities are present.
- B) assigning property rights is the only thing the government should do in a market economy.
- C) if transactions costs are low, private bargaining will result in an efficient solution to the problem of externalities.
- D) a free market equilibrium is the best solution to address externalities.

Answer: C

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

11) According to \_\_\_\_\_, in a market with an externality, private parties would voluntarily negotiate an efficient outcome without government intervention.

- A) A. C. Pigou
- B) Adam Smith
- C) Ronald Coase
- D) John Maynard Keynes

Answer: C

Diff: 1 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

12) Suppose a negative externality exists in a market. If transactions costs are low and parties are willing to bargain, then, according to the Coase theorem

- A) an equitable solution can be reached only if property rights are assigned to the victims of pollution and not the polluters.
- B) an equitable solution can be reached only if property rights are assigned to polluters and not to the victims of pollution.
- C) an efficient solution can be reached regardless of the initial assignment of property rights.
- D) government intervention is necessary to reach an efficient and equitable solution.

Answer: C

Diff: 3 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

13) If the paint on your house was eaten away by the fumes from a factory nearby and you hired a lawyer to sue the polluting firm, your legal fees would be considered

- A) external costs.
- B) transaction costs.
- C) marginal benefits.
- D) social costs of the pollution.

Answer: B

Diff: 1 Page Ref: 146

Topic: Transactions Costs

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking





- D) allow dog owners to bring their dogs to the park but insist that they keep watch over their dogs

Answer: C

Diff: 2 Page Ref: 147

Topic: Externalities

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 18) Economists Kenneth Chay and Michael Greenstone find that in the two years following the passage of the Clean Air Act of 1970, the sharp reduction in air pollution also led to a decline in infant deaths. Although this and other studies provide compelling evidence of the link between pollution and infant health, it is not clear that reductions from the much lower levels of ambient pollution today would have the same effect. Which of the following reasons could explain this?
- A) The cost of pollution abatement today is much higher than it was in the 1970s. Thus, it would be far more costly to achieve the same level of benefit today as the benefit achieved in 1970.
  - B) When levels of pollution are high, the marginal benefit of reducing pollution also is high. It follows therefore that the benefit of reducing air pollution in 1970 would be much higher than the benefit from a proportional reduction in air pollution today when the level of pollution is much lower.
  - C) Today, the level of pollution is much higher. Therefore, it will take a much larger reduction in air pollution to reap similar benefits as it did in 1970.
  - D) When levels of pollution are high, the marginal benefit of reducing pollution is low. Therefore, it was necessary to significantly reduce air pollution in 1970 before benefits can be realized. Today, when the level of pollution is much lower, such drastic measures are unnecessary.

Answer: B

Diff: 2 Page Ref: 142

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 19) James Meade, who won the Nobel Prize in Economics in 1977, argued that positive externalities resulted from
- A) reducing emissions of sulfur dioxide.
  - B) producing automobiles and automobile tires.
  - C) home owners in the Northeast moving to the South and Southwest United States.
  - D) apple growing and beekeeping.

Answer: D

Diff: 1 Page Ref: 145–146

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 20) In the United States, many beekeepers travel from state to state, renting out their bee colonies to farmers for pollination services. This is an example of
- A) a Coasian solution to a positive externality problem.
  - B) a Pigovian solution to a positive externality problem.
  - C) a tradable exchange contract.
  - D) command and control policy.

Answer: A

*Diff: 2 Page Ref: 145–146*

*Topic: The Coase Theorem*

*Learning Outcome: Micro–22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

- 21) Ronald Coase was awarded the 1991 Nobel Prize in Economics primarily for addressing problems related to externalities. Which of the following describes Coase's work?
- A) Coase argued that government intervention is necessary to achieve economic efficiency in markets that are affected by externalities.
  - B) Coase proved that economic efficiency cannot be achieved in a market that is affected by positive or negative externalities.
  - C) Coase argued that under some circumstances private solutions to the problems of externalities will occur.
  - D) Coase proved that a competitive market achieved a greater degree of economic efficiency than a non-competitive market when externalities occur.

**Answer: C**

*Diff: 2 Page Ref: 141*

*Topic: The Coase Theorem*

*Learning Outcome: Micro–22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

- 22) Congress passed the Clean Air Act in 1970. Since this act was passed, emissions of the six main air pollutants
- A) have fallen by more than one-half.
  - B) have increased significantly due to the growth of the U.S. economy.
  - C) cannot be measured since Congress failed to appropriate money to monitor the level of emissions.
  - D) have remained essentially constant, even though significant economic growth has occurred in the United States since 1970.

**Answer: A**

*Diff: 1 Page Ref: 142*

*Topic: Externalities*

*Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.*

*AACSB: Analytic thinking*

- 23) Kenneth Chay and Michael Greenstone examined the impact of reductions in air pollution since the passage of the Clean Air Act of 1970. Which of the following statements summarizes their findings?
- A) The marginal benefit of reductions in air pollution was less than the marginal cost.
  - B) The marginal cost of reducing emissions of sulfur dioxide has increased over time as the marginal benefit of the reductions has increased.
  - C) The benefits of reducing the six main air pollutants in the two years following the Act greatly exceeded the costs.
  - D) In the two years following passage of the Act, fewer infants died than would have died if the Act had not been passed.

**Answer: D**

*Diff: 2 Page Ref: 142*

*Topic: Externalities*

*Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.*

*AACSB: Analytic thinking*

- 24) If electric utilities continually reduce their emissions of sulfur dioxide
- A) the utilities will eventually be forced to go out of business.
  - B) the marginal benefit of additional emissions will rise.
  - C) the marginal cost of further emissions will rise.
  - D) the total benefit of sulfur dioxide emissions will fall.

Answer: C

Diff: 2 Page Ref: 141–143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 25) If the marginal benefit of reducing emissions of some air pollutant is greater than the marginal cost
- A) further reductions will make society better off.
  - B) the marginal benefit will rise and the marginal cost will fall as further reductions are made.
  - C) economic efficiency will be achieved when emissions are reduced to zero.
  - D) private businesses, rather the consumers, should be made to pay for the cost of further reductions.

Answer: A

Diff: 2 Page Ref: 141–143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 26) If the marginal benefit of reducing emissions of some air pollutant is less than the marginal cost
- A) further reductions will make society better off.
  - B) further reduction will make society worse off.
  - C) pollution taxes should be imposed on producers to pay for further reductions.
  - D) economic efficiency will be increased if further reductions are made.

Answer: B

Diff: 2 Page Ref: 141–143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 27) According to Steven Cheung: "Pollination contracts usually include stipulations regarding the number and strength of ...[bee] colonies, the rental fee per hive, the time of delivery...the protection of bees from pesticides, and the strategic placing of hives." Cheung cites this as evidence that
- A) the high costs of writing and enforcing complicated written agreements between owners of beehives and apple orchards prevents economic efficiency from being achieved in these markets.
  - B) government intervention is not always necessary to bring about an economically efficient number of apple trees and beehives.
  - C) government regulation of contracts between owners of beehives and apple orchards is necessary to bring about an economically efficient number of apple trees and beehives.
  - D) the beekeeping and apple growing businesses have become more complicated and costly over time due to the legal costs involved.

Answer: B

Diff: 2 Page Ref: 145–146

Topic: The Coase Theorem

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 28) Steven Cheung examined the relationship between beekeepers and apple growers. Cheung noted that: "Pollination contracts usually include stipulations regarding the number and strength of ... [bee] colonies, the rental fee per hive, the time of delivery...the protection of bees from pesticides, and the strategic placing of hives." Cheung's suggests that the relationship between beekeepers and apple growers is an example of

- A) the Coase Theorem.
- B) how excessive legal costs can prevent economic efficiency from being achieved.
- C) negative externalities.
- D) government intervention improving economic efficiency.

Answer: A

Diff: 3 Page Ref: 145–146

Topic: The Coase Theorem

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 29) Which of the following statements about the economically efficient level of air pollution is correct?

- A) The economically efficient level of pollution is zero.
- B) The economically efficient level of pollution occurs where all social costs equal all social benefits.
- C) The economically efficient level of pollution occurs where the marginal cost of pollution reduction equals the marginal social benefit of reduction.
- D) The economically efficient level of pollution occurs where total benefits of pollution reduction are maximized.

Answer: C

Diff: 2 Page Ref: 141–143

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 30) The costs in time and other resources that parties incur in the process of facilitating an exchange of goods and services are called

- A) enforcement costs.
- B) implicit costs.
- C) explicit costs.
- D) transaction costs.

Answer: D

Diff: 1 Page Ref: 146

Topic: Transactions Costs

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 31) Private solutions to the problem of externalities are most likely when
- A) government actively encourages these solutions.
  - B) transaction costs are low and the number of bargaining parties is small.
  - C) transaction costs are low and the number of bargaining parties is large.
  - D) transaction costs are low and the monetary damages to third parties is high.

Answer: B

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 32) Assume that air pollution from a copper smelter imposes external costs on people who live near the smelter. If the victims of the pollution could not legally enforce the right of their property not to be damaged, the amount of pollution reduction
- A) would be significantly less than if the owners of the smelter were legally liable for damages.
  - B) would be less than the amount at which the marginal benefit of pollution reduction equaled the marginal cost.
  - C) would be the same as if it would be if the owners of the smelter were legally liable.
  - D) would be too small; the government would have to intervene to bring about an efficient outcome.

Answer: C

Diff: 3 Page Ref: 141–143

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 33) Compare two situations. (A) A firm is not legally responsible for damages that result from air pollution caused by its production of steel. (B) A firm *is* legally responsible for damages that result from its production of steel. Ronald Coase argued that
- A) bargaining between the firm and the victims of the air pollution caused by the firm will result in little reduction of pollution in either situation (A) or (B) because the firm has greater economic and political power than the victims.
  - B) bargaining between the firm and the victims of the air pollution caused by the firm would lead to a greater reduction in pollution in situation (A) than situation (B).
  - C) bargaining between the firm and the victims of the air pollution caused by the firm would lead to a smaller reduction in pollution in situation (A) than situation (B).
  - D) bargaining between the firm and the victims of the air pollution caused by the firm would lead to an equal reduction in pollution in situation (A) and situation (B).

Answer: D

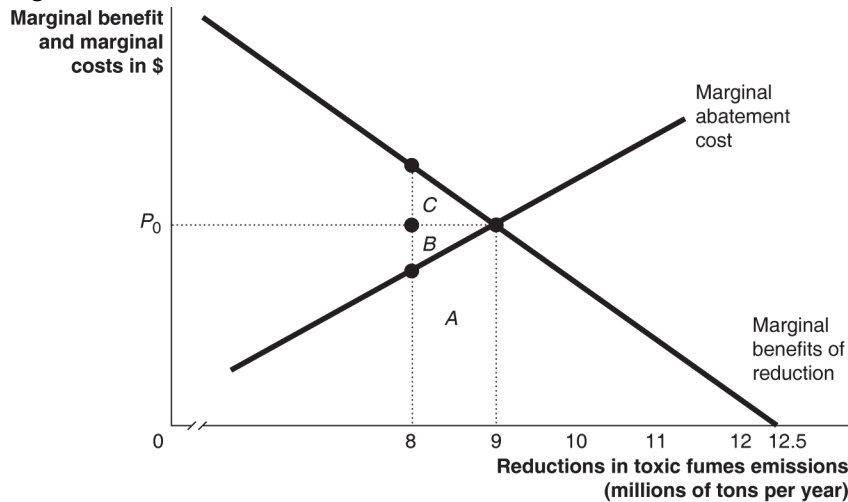
Diff: 3 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5–8



Consider a chemical plant that discharges toxic fumes over a nearby community. To reduce the emissions of toxic fumes the firm can install pollution abatement devices. Figure 5–8 shows the marginal benefit and the marginal cost from reducing the toxic fumes emissions.

34) Refer to Figure 5–8. What is the economically efficient level of pollution reduction?

- A) 12.5 million tons
- B) 9 million tons
- C) 8 million tons
- D) 0 tons

Answer: B

Diff: 1 Page Ref: 144

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

35) Refer to Figure 5–8. Suppose the emissions reduction target is currently established at 8 million tons. What is the area that represents the cost of eliminating an additional 1 million tons?

- A) A
- B) B + C
- C) A + B
- D) A + B + C

Answer: A

Diff: 2 Page Ref: 144

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

36) Refer to Figure 5–8. Suppose the emissions reduction target is currently established at 8 million tons. Should society undertake to reduce an additional 1 million tons so that the total reduction is 9 million tons?

- A) No, because there is a net cost represented by the area B + C.
- B) Yes, because the marginal benefit exceeds the marginal costs.
- C) Yes, because toxic fumes are dangerous and must be eliminated at any cost.
- D) No, because the firms will pass the additional cost on to consumers.

Answer: B

Diff: 2 Page Ref: 144

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 37) Suppose a negative externality exists in a market. If transactions costs are low and parties are willing to bargain then, according to the Coase theorem
- A) an efficient solution can be reached only if property rights are assigned to the victims of the pollution.
  - B) an efficient solution can be reached only if property rights are assigned to the polluters.
  - C) an efficient solution can be reached regardless of the initial assignment of property rights.
  - D) government intervention is critical to reach an efficient solution.

Answer: C

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 38) Congressman Murphy made the following proposal: "We should establish policies that completely eliminate air pollution. This is the only way to ensure that none of our citizens suffers the negative effects of air pollution." If Congressman Murphy's proposal was adopted and all forms of air pollution were eliminated, which of the following would be *true*?
- A) The total cost of pollution reductions would equal the total benefit to society.
  - B) Economic efficiency would be maximized
  - C) The total benefit to society from reductions in air pollution would be maximized.
  - D) The marginal cost from pollution reductions would exceed the marginal benefit.

Answer: D

Diff: 2 Page Ref: 145

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 39) In economics, the optimal level of pollution is the level for which the net benefit from reducing the pollution is the greatest.

Answer: TRUE

Diff: 2 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 40) If there is pollution in producing a product, then the market equilibrium price is too high and equilibrium quantity is too low.

Answer: FALSE

Diff: 2 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 41) For the Coase theorem to work there must be clear assignment of property rights.

Answer: TRUE

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 42) The Coase Theorem asserts that government intervention is a prerequisite for addressing externality problems.

Answer: FALSE

Diff: 1 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 43) If transactions costs are low, private bargaining will always result in an efficient solution to the problem of externalities.

Answer: FALSE

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 44) State the Coase theorem.

Answer: The Coase theorem states that if transactions costs are low, private bargaining will result in an efficient solution to the problem of externalities, regardless of initial assignment of property rights.

Diff: 2 Page Ref: 147

Topic: The Coase Theorem

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 45) Should the level of pollution be reduced to zero and if not, then to what level?

Answer: No, the level of pollution should not be reduced to zero because the benefits reaped from greater and greater amounts of pollution reduction may not justify the cost of those incremental cleanups. Pollution should be reduced up to the point where the marginal benefit of pollution reduction equals to the marginal cost of pollution reduction.

Diff: 3 Page Ref: 141–143

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 46) The Wilfer Resort Hotel has a spectacular view of a pine forest along a river bank. Suppose a commercial logger has purchased the pine forest and is planning to clear-cut the forest in a way that has a negative impact on the resort. Can the two parties arrive at a Coasian solution and if so what is it?

Answer: In this case, since there are only two parties involved, private bargaining can bring about an efficient outcome. For example, the resort-owner could pay the logger not to clear-cut the forest or could buy the forest from its owner.

Diff: 2 Page Ref: 147

Topic: Externalities and Economic Efficiency

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking



- 47) What are transactions costs? Why do transactions costs create difficulties in finding a private solution to the problem of pollution?

Answer: Transactions costs refer to the costs in time and other resources that parties incur in the process of agreeing to and carrying out an exchange of goods or services. In the case of pollution, there are often both many polluters and many people suffering from the negative effects of pollution. The transactions costs in dealing with the reduction of pollution would include the time and other costs of negotiating and monitoring an agreement, drawing up a binding contract, and purchasing insurance. When many people are involved, the transactions costs can be higher than the net benefit from reducing the pollution and a private solution may not be feasible.

*Diff: 2 Page Ref: 146*

*Topic: Transactions Costs*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

- 48) What are some of the limitations of the Coase theorem in practice?

Answer: Some limitations of the theorem are as follows. First, the Coase theorem works only if the transaction costs are low, which is unlikely if there are many bargaining parties. Second, private solutions to the problem of externalities will occur only if all parties to the agreement have full information about the costs and benefits associated with the externality. In reality, this may not be likely or may be difficult to ensure. Third, all parties must be willing to accept a reasonable agreement. For example, if those suffering from the effects of pollution do not have information on the costs of reducing pollution it is unlikely that parties can reach an agreement. Unreasonable demands can hinder an agreement.

*Diff: 2 Page Ref: 147*

*Topic: The Coase Theorem*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

- 49) Ronald Coase is famous for the Coase Theorem, which is based on the premise that there is an economically efficient level of pollution reduction. Many economists believe that the tradable emissions allowance program that has been used to deal with the problem of acid rain has been successful in reducing emissions of sulfur dioxide in an economically efficient manner. Why isn't this program an example of the Coase Theorem?

Answer: The Coase Theorem states that if transactions costs are low private bargaining will result in an efficient solution to the problem of externalities. Tradable emissions allowance programs are one type of market-based solution to the problem of negative externalities, but these programs are initiated by government, not private parties.

*Diff: 3 Page Ref: 147*

*Topic: The Coase Theorem*

*Learning Outcome: Micro-22: Explain how externalities affect market efficiency.*

*AACSB: Analytic thinking*

### 5.3 Government Policies to Deal with Externalities

- 1) Who was the economist who first proposed that governments use taxes and subsidies to correct for externalities?

A) Ronald Coase      B) A. C. Pigou      C) Adam Smith      D) David Hume

Answer: B

Diff: 1      Page Ref: 147

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 2) What does the phrase "internalizing an external cost" mean?

A) limiting the extent to which domestic firms can outsource production  
 B) prohibiting economic activities that create externalities  
 C) forcing producers to factor into their production costs the cost of the externalities created in the production of their output  
 D) finding a way to address cross-border pollution

Answer: C

Diff: 1      Page Ref: 147

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 3) Which of the following criteria should be used to evaluate if government intervention in a market for the purpose of environmental protection is justified?

A) Does the intervention program reduce pollution to zero using the least costly method?  
 B) Is the intervention program economically efficient?  
 C) Does the intervention program make the amount of economic surplus as large as possible?  
 D) Is the damage to the environment from government intervention as small as possible?

Answer: B

Diff: 2      Page Ref: 147

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 4) If policymakers use a pollution tax to control pollution, the tax per unit of pollution should be set

A) equal to the marginal external cost at the economically efficient level of pollution.  
 B) equal to the marginal private cost of production at the economically efficient level of pollution.  
 C) equal to the amount of the deadweight loss created in the absence of a pollution tax.  
 D) at a level low enough so that producers can pass along a portion of the additional cost onto consumers without significantly reducing demand for the product.

Answer: A

Diff: 2      Page Ref: 147

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 5) An advantage of imposing a tax on the producer that generates pollution is that
- A) it forces the polluting producer to internalize the external cost of the pollution.
  - B) the government can keep tabs on exactly what is produced in an industry.
  - C) it will eliminate pollution.
  - D) a producer can pass the cost of the pollution to consumers.

Answer: A

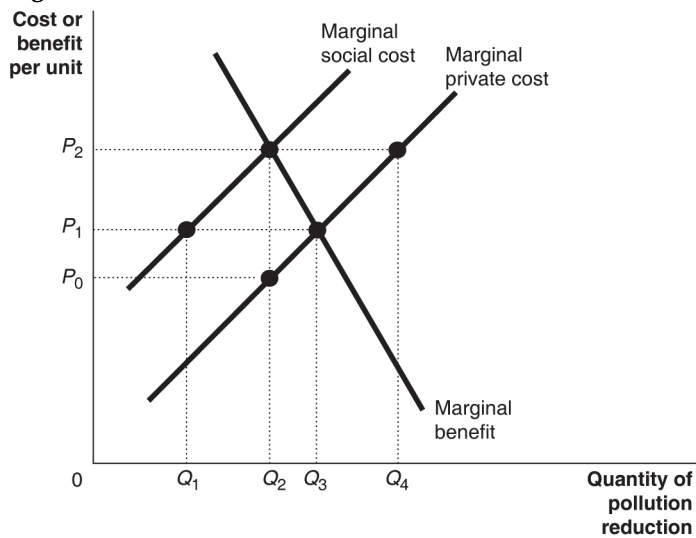
Diff: 2 Page Ref: 147

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-9



Companies producing toilet paper bleach the paper to make it white. The bleach is discharged into rivers and lakes and causes substantial environmental damage. Figure 5-9 illustrates the situation in the toilet paper market.

- 6) Refer to Figure 5-9. The efficient output is
- A)  $Q_1$ .
  - B)  $Q_2$ .
  - C)  $Q_3$ .
  - D)  $Q_4$ .

Answer: B

Diff: 2 Page Ref: 147-148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 7) Refer to Figure 5-9. The private profit-maximizing output level is
- A)  $Q_1$ .
  - B)  $Q_2$ .
  - C)  $Q_3$ .
  - D)  $Q_4$ .

Answer: C

Diff: 2 Page Ref: 147-148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

8) **Refer to Figure 5-9.** An efficient way to get the firm to produce the socially optimal output level is

- A) for government to set a quota on the quantity of toilet paper that the toilet paper industry can produce.
- B) to impose a tax to make the industry bear the external costs it creates.
- C) to grant a subsidy to enable the industry to internalize the external costs of production.
- D) to assign property rights to the firms in the industry.

Answer: B

Diff: 2 Page Ref: 147-148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

9) **Refer to Figure 5-9.** Suppose the government wants to use a Pigovian tax to bring about the efficient level of production. What should the value of the tax be?

- A)  $(P_2 - P_1)$  per ton of output
- B)  $(P_2 - P_0)$  per ton of output
- C)  $(P_1 - P_0)$  per ton of output
- D)  $P_1$  per ton of output

Answer: B

Diff: 2 Page Ref: 147-148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

10) **Refer to Figure 5-9.** Let's suppose the government imposes a tax of \$50 per ton of toilet paper to bring about the efficient level of production. What happens to the market price of toilet paper?

- A) It rises by \$50.
- B) It rises by more than \$50.
- C) It rises by less than \$50.
- D) It remains the same because the tax is imposed on producers who create the externality.

Answer: C

Diff: 2 Page Ref: 147-148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

11) Suppose a tax equal to the value of the marginal external cost at the optimal output is imposed on a pollution generating good. All of the following will result from the tax *except*

- A) an increase in the equilibrium market price.
- B) a decrease in the equilibrium quantity produced and consumed.
- C) a decrease in market supply of the good.
- D) an increase in the demand for the good.

Answer: D

Diff: 2 Page Ref: 147

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 12) Governments can increase the consumption of a product that creates positive externalities by
- A) subsidizing the production of the product so that the supply is increased and market price is reduced.
  - B) taxing the production and consumption of the product.
  - C) convincing everyone to consume the good.
  - D) assigning property rights to the producers of the product.

Answer: A

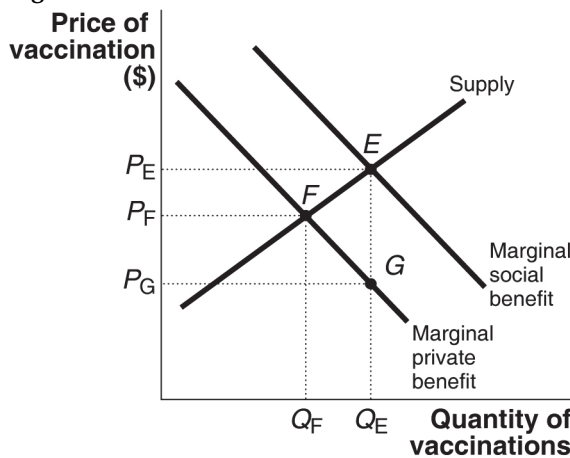
Diff: 2 Page Ref: 148

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 5-10



Chicken pox vaccinations for toddlers benefit society by protecting young children and by preventing an epidemic of the disease. Thus, the social benefits of chicken pox vaccinations exceed the private benefit for any quantity of vaccinations as illustrated in Figure 5-10.

- 13) Refer to Figure 5-10. One way to obtain the economically efficient amount of chicken pox vaccinations is for governments to subsidize these vaccinations. What is the size of the per-vaccination Pigovian subsidy that the government must provide to internalize the external benefits?

- A)  $P_E$
- B)  $(P_E - P_G)$
- C)  $(P_E - P_F)$
- D)  $(P_F - P_G)$

Answer: B

Diff: 2 Page Ref: 148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking



Diff: 2 Page Ref: 152–153

Topic: Tradable Emissions Allowances

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 18) A major problem with using tradable emissions allowance system to control pollution is
- A) that it grants firms a license to pollute.
  - B) the difficulty in determining the emissions target.
  - C) it discourages firms from implementing cost-effective pollution control technology.
  - D) that it does not eliminate pollution completely.

Answer: B

Diff: 1 Page Ref: 152–153

Topic: Tradable Emissions Allowances

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 19) Anyone can purchase sulfur dioxide emissions allowances on the Chicago Mercantile Exchange. Several environmental groups have raised money to buy allowances (which they subsequently destroy). As part of their fund-raising, these groups have urged contributors to buy the allowances as gifts. As one newspaper story put it, "For the environmentalist in your life, here's a gift that is sold by the ton, fits in an envelope and will last forever."
- Source for quote: Randall Edwards, "Dear Santa: Please Bring Me Sulfur Dioxide for Christmas," *Columbus Dispatch*, December 19, 1999.

What would be the impact on the price of the emission allowances in the market?

- A) The price rises.
- B) The price falls to zero.
- C) The price falls but not to zero.
- D) The price remains unchanged because the allowances purchased by the environmental groups are destroyed.

Answer: A

Diff: 2 Page Ref: 152–153

Topic: Tradable Emissions Allowances

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 20) Some policymakers have argue that products like cigarettes, alcohol, and sweetened soda generate negative externalities in consumption. If the government decided to impose a tax on soda, the government will cause
- A) consumers to internalize the externality.
  - B) producers to internalize the externality.
  - C) the external cost to drinking soda to become a private cost paid by the government.
  - D) the external cost to drinking soda to become a private cost paid by producers.

Answer: A

Diff: 2 Page Ref: 148–150

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 21) Some policymakers have argue that products like cigarettes, alcohol, and sweetened soda generate negative externalities in consumption. All else equal, if the government decided to impose a tax on soda, the equilibrium quantity of soda would \_\_\_\_\_ and the equilibrium price of soda would \_\_\_\_\_.

A) increase; increase  
B) increase; decrease  
C) decrease; increase  
D) decrease; decrease

Answer: D

Diff: 2 Page Ref: 148–150

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 22) The 2005, 24 European Union nations established a cap-and-trade system which was designed to

A) eliminate air pollution and greenhouse gases by the year 2020.  
B) reduce carbon dioxide emissions.  
C) provide fast growing developing countries with the technology to reduce their carbon emissions.  
D) remove all taxes from polluting industries.

Answer: B

Diff: 1 Page Ref: 153–154

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 23) Economists working at federal government agencies have estimated that the marginal social cost of carbon is about

A) \$2 per ton. B) \$9 per ton. C) \$21 per ton. D) \$47 per ton.

Answer: C

Diff: 1 Page Ref: 153–154

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 24) The first economist to systematically analyze market failure was

A) Adam Smith. B) Ronald Coase. C) A. C. Pigou. D) J. E. Meade.

Answer: C

Diff: 1 Page Ref: 147

Topic: Market Failure

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

- 25) Assume that production from an electric utility caused acid rain. If the government imposed a tax on the utility equal to the cost of the acid rain, the government's action would

A) externalize the externality.  
B) result in a marginal social benefit greater than the marginal cost of the electricity.  
C) be an example of supply side economic policy.  
D) internalize the externality.

Answer: D



Diff: 2 Page Ref: 147

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 26) Assume that production from an electric utility caused acid rain and that the government imposed a tax on the utility equal to the cost of the acid rain. This is an example of
- A) a transaction cost.
  - B) a Pigovian tax.
  - C) a Pigovian subsidy.
  - D) the Coase Theorem.

Answer: B

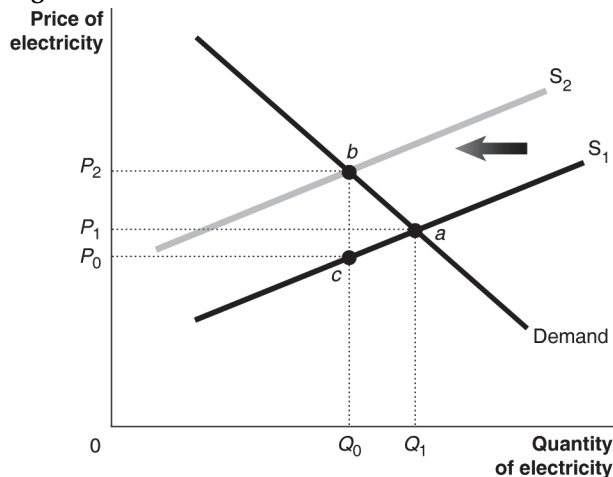
Diff: 2 Page Ref: 152

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-11



Coal burning utilities release sulfur dioxide and nitric acid which react with water to produce acid rain. Acid rain damages trees and crops and kills fish. Because the utilities do not bear the cost of the acid rain they overproduce the quantity of electricity. This is illustrated in Figure 5-11.

- 27) Refer to Figure 5-11.  $S_1$  represents the supply curve that reflects the private cost of production and  $S_2$  represents the supply curve that reflects the social cost of production. One way to internalize the external cost generated by utilities is to impose a Pigovian tax on the production of electricity. What is the size of the Pigovian tax that will internalize the cost of the externality?
- A)  $P_0$
  - B)  $P_2 - P_0$
  - C)  $P_1 - P_0$
  - D)  $P_2 - P_1$

Answer: B

Diff: 3 Page Ref: 147

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

28) Policies that mandate the installation of specific pollution control devices are called

- A) command and control policies.
- B) benefit policies.
- C) welfare policies.
- D) incentive policies.

Answer: A

Diff: 1 Page Ref: 152

Topic: Command and Control Approach

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

29) Economic incentives are designed to make individual self-interest coincide with social interest.

According to economists, which of the following methods of pollution control best uses economic incentives to reduce pollution?

- A) Rewarding environmental groups for monitoring the activities of private firms that produce products which generate pollution.
- B) Imposing quantitative limits on the amount of pollution and imposing a penalty for non-compliance with these limits.
- C) Requiring the installation of specific pollution control devices.
- D) Instituting a system of tradable emissions allowances.

Answer: D

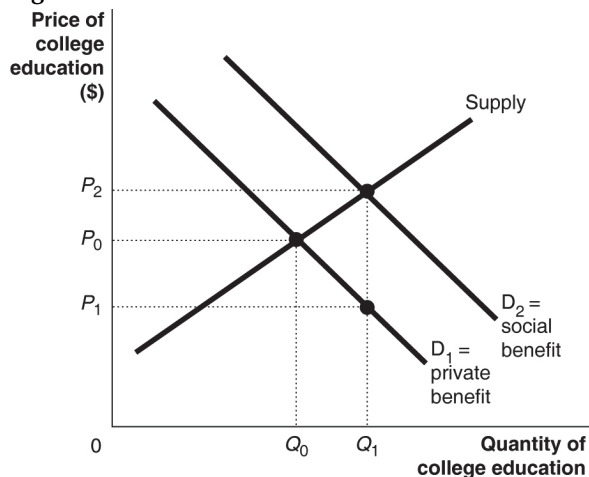
Diff: 3 Page Ref: 153

Topic: Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 5-12



College education benefits society by producing a more employable workforce, reducing crime and creating a better informed citizenry. Thus, the social benefits of college education exceed the private benefits for any level of college education. This is illustrated in Figure 5-12.

30) Refer to Figure 5-12. One way to obtain the economically efficient amount of college education is for governments to subsidize college education. What is the size of the per-student Pigovian subsidy that the government must provide to internalize the external benefits? (Note that the subsidy can be granted to the education institutions or to the students directly or indirectly; for example, through low-interest student loans.)

A)  $P_2 - P_0$ B)  $P_2 - P_1$ C)  $P_0 - P_1$ D)  $P_1$ 

Answer: B

Diff: 2 Page Ref: 148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 31) State and local governments subsidize college students with grants and low-interest loans. The loans and subsidies are examples of

A) positive externalities.

B) Coase subsidies.

C) Pigovian subsidies.

D) emission allowances.

Answer: C

Diff: 2 Page Ref: 152

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 32) Which of the following is an example of a Pigovian tax?

A) payments by utilities to obtain tradable emissions allowances

B) a payroll tax

C) payments for licenses to pollute

D) a tax imposed on a utility that internalizes the cost of externalities caused by the utility

Answer: D

Diff: 2 Page Ref: 152

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 33) The efficient level of paper production will occur where the

A) marginal private benefit from consuming paper is equal to the marginal social cost of production.

B) marginal social benefit from consuming paper is equal to the marginal social cost of production.

C) the economically efficient level of the output of paper is equal to the economically efficient level of inputs.

D) production of paper no longer produces negative externalities.

Answer: A

Diff: 1 Page Ref: 147

Topic: Marginal Benefit and Marginal Cost of Pollution Reduction

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 34) Which of the following describes a positive externality?

A) John Henry paints the outside of his house in order to increase its market value just before he puts the house up for sale.

B) People who do not attend college still benefit from others who receive a college education.

C) The government imposes a tax on cigarettes in order to discourage smoking among teenagers.

D) Mary volunteers to drive her neighbor's children to soccer practice.

Answer: B

Diff: 2 Page Ref: 148

Topic: Positive Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

35) The U.S. government has frequently used a "command and control" approach in dealing with pollution. Which of the following describes this approach?

- A) The government uses taxes in order to internalize the externalities caused by pollution.
- B) The government uses subsidies to encourage firms to use new technology that reduces pollution.
- C) The government imposes quantitative limits on the amount of pollution firms are allowed to generate.
- D) The government distributes information to consumers and producers on how to reduce pollution.

Answer: C

Diff: 2 Page Ref: 152

Topic: Command and Control Approach

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

36) Which of the following is an example of the U.S. government's use of a "command and control" approach to reducing pollution?

- A) In 1990 Congress approved measures designed to reduce sulfur dioxide emissions to 8.5 million tons annually by 2010.
- B) The U.S. government imposed a tax on electric utilities to reduce damages from acid rain.
- C) The government issued electric utilities tradable emissions allowances in order to reduce emissions of nitrogen oxide.
- D) In the 1980s the U.S. government required the installation of catalytic converters to reduce emissions from all new automobiles.

Answer: D

Diff: 2 Page Ref: 152

Topic: Command and Control Approach

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

37) Economists generally favor the use of tradable emissions allowances to reduce pollution. However, the use of these allowances has been criticized by some environmentalists. Which of the following describes this criticism?

- A) Some environmentalists believe the allowances give firms a license to pollute.
- B) Some environmentalists believe that the price of allowances is often too high for consumers to afford.
- C) Some environmentalists believe that Pigovian taxes are a more efficient way to reduce pollution.
- D) Some environmentalists oppose allowances on legal grounds; they believe the use of allowances is unconstitutional.

Answer: A

Diff: 2 Page Ref: 152–153

Topic: Tradable Emissions Allowances

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

**Figure 5–13**

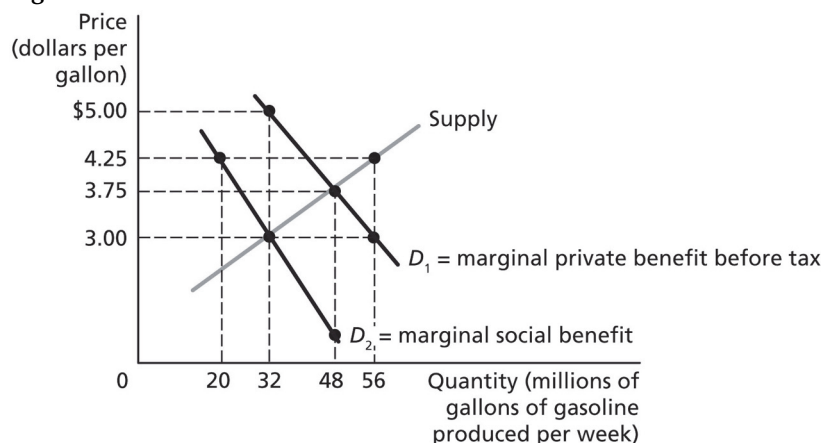


Figure 5–13 illustrates the market for gasoline before and after the government imposes a tax to bring about the efficient level of gasoline production.

- 38) **Refer to Figure 5–13.** The efficient equilibrium quantity of gasoline is \_\_\_\_\_ million gallons per month.

A) 20                      B) 32                      C) 48                      D) 56

Answer: B

Diff: 2 Page Ref: 150–151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 39) **Refer to Figure 5–13.** The market equilibrium quantity of gasoline is \_\_\_\_\_ million gallons per month.

A) 20                      B) 32                      C) 48                      D) 56

Answer: C

Diff: 2 Page Ref: 150–151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 40) **Refer to Figure 5-13.** The efficient equilibrium price of gasoline is \_\_\_\_\_ per gallon.  
 A) \$3.00                      B) \$3.75                      C) \$4.25                      D) \$5.00

Answer: A

Diff: 2      Page Ref: 150-151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 41) **Refer to Figure 5-13.** The market equilibrium price of gasoline is \_\_\_\_\_ per gallon.  
 A) \$3.00                      B) \$3.75                      C) \$4.25                      D) \$5.00

Answer: B

Diff: 2      Page Ref: 150-151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 42) **Refer to Figure 5-13.** The actual price of gasoline paid by consumers after the tax is implemented is \_\_\_\_\_ per gallon.  
 A) \$3.00                      B) \$3.75                      C) \$4.25                      D) \$5.00

Answer: D

Diff: 2      Page Ref: 150-151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 43) **Refer to Figure 5-13.** The amount of the gasoline tax is \_\_\_\_\_ per gallon.  
 A) \$0.75                      B) \$1.25                      C) \$1.75                      D) \$2.00

Answer: D

Diff: 2      Page Ref: 150-151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 44) **Refer to Figure 5-13.** The gasoline tax raises the price paid by consumers by \_\_\_\_\_ per gallon.  
 A) \$0.75                      B) \$1.25                      C) \$1.75                      D) \$2.00

Answer: B

Diff: 2      Page Ref: 150-151

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 45) When a tax on output is imposed to internalize the external costs of pollution, the supply curve shifts down by the amount of the tax.

Answer: FALSE

Diff: 1 Page Ref: 147

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 46) One problem with using a command and control approach to pollution reduction is that the monitoring costs may be too high.

Answer: TRUE

Diff: 1 Page Ref: 152

Topic: Command and Control Approach

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 47) Suppose the government mandates the installation of certain type of pollution abatement equipment for the leather tannery industry. For some firms in the industry, installing this equipment may not be the most cost effective method of reducing pollution.

Answer: TRUE

Diff: 2 Page Ref: 147-148

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 48) When the government imposes a tax equal to the external cost of producing a product that causes pollution, the government is said to externalize the externality.

Answer: FALSE

Diff: 1 Page Ref: 147

Topic: Negative Externality

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 49) A.C. Pigou argued that the government can deal with a positive externality in consumption by giving consumers a subsidy equal to the value of the externality.

Answer: TRUE

Diff: 1 Page Ref: 148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 50) Issuing marketable emission allowance permits to polluting firms will result in those firms polluting more than is socially desirable.

Answer: FALSE

Diff: 2 Page Ref: 147-148

Topic: Government Policies to Deal with Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

51) What is a Pigovian tax? What happens to deadweight loss when a Pigovian tax is implemented?

Answer: A Pigovian tax is a government tax intended to bring about an efficient level of output in the presence of externalities. A Pigovian tax eliminates deadweight loss.

Diff: 1 Page Ref: 152

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

52) Briefly explain the command-and-control approach in dealing with an externality such as pollution. Give an example of the U.S. government using the command-and-control approach to deal with the pollution problem.

Answer: Command-and-control is an approach that involves the government imposing quantitative limits on the amount of pollution firms are allowed to emit or requiring firms to install specific pollution control devices. One example listed in the text occurred in 1983, when the federal government required auto manufacturers to install catalytic converters to reduce auto emissions on all new automobiles.

Diff: 2 Page Ref: 152

Topic: Command and Control Approach

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

53) Economist A.C. Pigou argued that to deal with a negative externality in production, the government should impose a tax equal to the cost of the externality. What did Pigou believe should be done in the case of a positive externality in consumption? How would his recommendation impact the demand and market equilibrium for the product which is generating the positive externality?

Answer: Pigou believed that, in the case of a positive externality in consumption, the government should give consumers a subsidy equal to the value of the externality. By giving a subsidy equal to the value of the externality, the external benefit will become a private benefit and demand for the product will increase to the point where the market equilibrium is also the efficient equilibrium.

Diff: 2 Page Ref: 148

Topic: Pigovian Taxes and Subsidies

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

54) What is meant by the term "internalizing an externality"? How does a Pigovian tax or subsidy internalize an externality?

Answer: Internalizing an externality refers to transferring the external benefit or cost to the producer or consumer that generates the externality. A Pigovian tax transfers a negative externality in production back to the producer, which reduces the supply of the product and results in an efficient level of output. A Pigovian subsidy transfers a positive externality in consumption back to the consumer, which increases the demand for the product and results in an efficient level of output.

Diff: 2 Page Ref: 147-148

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking



- 55) Some environmentalists have criticized tradable emissions allowances on the grounds that they give permit holders a license to pollute. Furthermore, environmentalists argue that those who sell their permits receive a monetary benefit from their contribution to polluting the environment. Use economic reasoning to evaluate this criticism.

Answer: The criticism ignores one of the central lessons of economics: resources are scarce and trade-offs exist. Resources spent reducing one type of pollution are not available for other uses. Furthermore, the opportunity cost of polluting (using the permit) is the price of the permit. In other words, firms are forced to face the cost of polluting. So although firms receive a monetary benefit from the sale of permits, the scheme gives them the incentive to find the cheapest way to reduce pollution.

Diff: 3 Page Ref: 152–153

Topic: Tradable Emissions Allowances

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

Figure 5-14

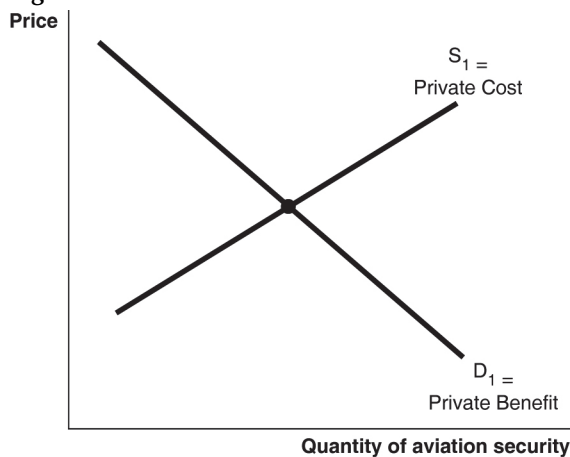
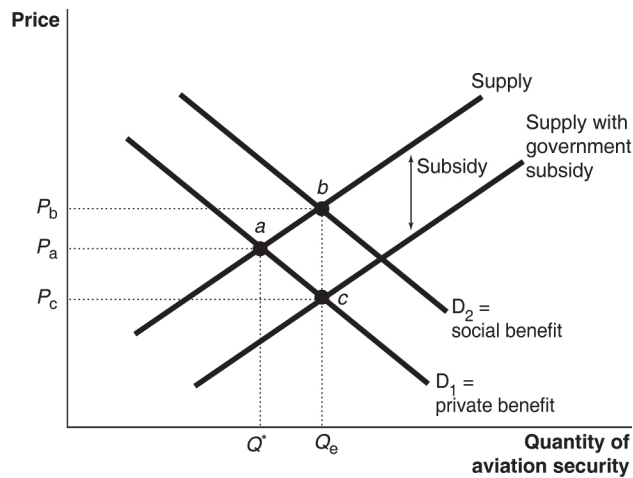


Figure 5-14 shows the market for aviation security. Aviation security generates a positive externality because people who are not airline passengers benefit from aviation security.

- 56) Refer to Figure 5-14 to answer the following questions.
- In the absence of any government intervention what is the equilibrium level of security that airlines will supply? Denote this level,  $Q^*$ . Briefly explain why this quantity is not the economically efficient level of aviation security.
  - In the diagram, illustrate the presence of positive externalities in the aviation security market. Label any new curve that you draw.
  - On your diagram identify the economically efficient level of aviation security. Denote this level  $Q_e$ .
  - Explain how a government subsidy for the airlines can bring about the economically efficient aviation security level. Be sure to identify the size of the subsidy.

Answer:



- See the figure above.  $Q^*$  is not the optimal level because aviation security creates positive externalities. As a result the social benefit exceeds the private benefit for any quantity. Since airlines do not factor in the external benefits they will offer less than the economically efficient level of aviation security.
- See the figure above.
- See the figure above.
- To induce airlines to offer a higher level of security the government can subsidize the airlines. The size of the subsidy required to internalize the positive externality is equal to the external benefit at the economically efficient output level.

Diff: 3 Page Ref: 148

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

## 5.4 Four Categories of Goods

- A product is considered to be rivalrous if
  - you can keep those who did not pay for the item from enjoying its benefits.
  - you cannot keep those who did not pay for the item from enjoying its benefits.
  - your consumption of the product reduces the quantity available for others to consume.
  - it is jointly owned by all members of a community.

Answer: C

Diff: 1 Page Ref: 154

Topic: Rivalry

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 2) A product is considered to be nonexcludable if
- A) you can keep those who did not pay for the item from enjoying its benefits.
  - B) you cannot keep those who did not pay for the item from enjoying its benefits.
  - C) your consumption of the product reduces the quantity available for others to consume.
  - D) it is jointly owned by all members of a community.

Answer: B

Diff: 1 Page Ref: 154

Topic: Excludability

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 3) Which of the following displays these two characteristics: rivalry and nonexcludability?
- A) a public good
  - B) a private good
  - C) a quasi-public good
  - D) a common resource

Answer: D

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 4) Which of the following displays these two characteristics: nonrivalry and nonexcludability in consumption?
- A) public goods
  - B) private goods
  - C) quasi-public goods
  - D) common resources

Answer: A

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 5) Which of the following displays these two characteristics: nonrivalry and excludability?
- A) public goods
  - B) private goods
  - C) quasi-public goods
  - D) common resources

Answer: C

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 6) Which of the following displays rivalry and excludability in consumption?
- A) public goods
  - B) private goods
  - C) quasi-public goods
  - D) common resources

Answer: B

Diff: 1 Page Ref: 154

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 7) Which of the following is an example of a product that is nonexcludable and rivalrous?
- A) free concert (with limited seating) in a park
  - B) national defense
  - C) automobiles
  - D) flu vaccinations

Answer: A

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 8) Which of the following is an example of a quasi-public good?
- A) cable television
  - B) organic apples
  - C) stock of knowledge in the public domain
  - D) crime prevention

Answer: A

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 9) Which of the following is an example of a common resource?
- A) the Sumatran tiger population in the world
  - B) rabbit fur
  - C) the stock of knowledge in the public domain
  - D) taxicab services

Answer: A

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 10) Common resources differ from public goods in that
- A) common resources are non-excludable while public goods are excludable to those who do not pay for the good.
  - B) unlike public goods, common resources are rivalrous in consumption.
  - C) common resources are collectively owned by a group of people while public goods are government owned.
  - D) common resources are resources that cannot be renewed but the production of public goods can be increased any time.

Answer: B

Diff: 2 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 11) In economics, the term "free rider" refers to
- A) a person who evades taxes.
  - B) a supervisor who delegates menial time-consuming activities to others.
  - C) one who volunteers her services.
  - D) one who waits for others to produce a good and then enjoys its benefits without paying for it.

Answer: D

Diff: 1 Page Ref: 155

Topic: Free Riding

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 12) The demand curve for a public good is also called the
- A) total welfare curve.
  - B) marginal social benefit curve.
  - C) total social benefit curve.
  - D) total willingness-to-pay curve.

Answer: B

Diff: 1 Page Ref: 155

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 13) How does the construction of a market demand curve for a private good differ from that for a public good?
- A) There is no difference; in both cases the demand curve is determined by adding up the price each consumer is willing to pay for each quantity of the good.
  - B) There is no difference; in both cases the demand curve is determined by adding up the quantities demanded by each consumer at each price.
  - C) The market demand curve for a private good is determined by adding up the quantities demanded by each consumer at each price but the market demand curve for a public good is determined by adding up the price each consumer is willing to pay for each quantity of the good.
  - D) The market demand curve for a private good is determined by adding up the price each consumer is willing to pay for each quantity of the good but the market demand curve for a public good is determined by adding up the quantities demanded by each consumer at each price.

Answer: C

Diff: 2 Page Ref: 155-156

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 14) The market demand for a public good can be determined by
- A) adding up the total private benefits and external benefits that each quantity provides the citizens of a country.
  - B) adding up how much each citizen expects to consume at each possible price.
  - C) adding up how much each consumer is willing to pay for each unit of the public good.
  - D) estimating the value of the benefit that each unit provides and multiplying that by the number of consumers.

Answer: C

Diff: 2 Page Ref: 155–156

Topic: Public Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 15) One difference between the demand for a private good and that for a public good is that
- A) with a private good, each consumer chooses the quantity she wants to consume but with a public good, each consumer chooses the price she is willing to pay for a fixed quantity.
  - B) with a private good, each consumer chooses the quantity she wants to consume but with a public good, everyone consumes the same quantity.
  - C) with a private good, each consumer receives different amounts of benefit from consuming the product but with a public good, every consumer realizes the same amount of benefit from consuming the product.
  - D) the marginal benefit from consuming the last unit of a public good always exceeds the marginal benefit from consuming the last unit of a private good because there are externalities in the consumption of the former.

Answer: B

Diff: 2 Page Ref: 155–156

Topic: Public Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 16) For certain public projects such as building a dam on a river or a bridge to an island, what procedure is a government likely to use to determine what quantity of a public good should be supplied?
- A) It conducts public surveys to determine if consumers want the product.
  - B) It hires economists to estimate the market demand for the product.
  - C) It takes a vote in Congress.
  - D) It evaluates the costs and benefits of producing the good.

Answer: D

Diff: 1 Page Ref: 157

Topic: Public Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 17) For-profit producers will produce only private goods because
- A) markets exist for private goods but not for public goods.
  - B) the cost of production can be easily determined.
  - C) buyers will be willing to pay for the goods since the benefits are excludable.
  - D) all external benefits can be internalized using market prices.

Answer: C

Diff: 1 Page Ref: 154–155

Topic: Private Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 18) Private producers have no incentive to provide public goods because
- A) the government subsidy granted is usually insufficient to enable private producers to make a profit.
  - B) production of huge quantities of public goods entails huge fixed costs.
  - C) they cannot avoid the tragedy of the commons.
  - D) once produced, it will not be possible to exclude those who do not pay for the good.

Answer: D

Diff: 2 Page Ref: 155

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 19) Sefronia and Bella share an apartment and they are deciding whether or not to purchase a weekly housecleaning service. The value of the service to each of them is \$50 and it costs \$80 to hire a housecleaner. Should they hire a housecleaner?
- A) Yes, if each contributes \$50, then each stands to gain a consumer surplus.
  - B) No, because each will wait for the other to hire the housecleaner.
  - C) Yes, but only if a housecleaner will accept \$50 so that each can take turns to pay the housecleaner.
  - D) No, because it will be difficult for them to agree on which housecleaning service to use.

Answer: A

Diff: 2 Page Ref: 155–156

Topic: Private Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 20) Sefronia and Bella share an apartment and they are deciding whether or not to purchase a weekly housecleaning service. The value of the service to each of them is \$50 and it costs \$80 to hire a housecleaner. Suppose Bella is lazy and a spendthrift and Sefronia suspects that Bella will be willing to pay \$80. What is Sefronia likely to do, given that she is as rational as any other person?
- A) She will correctly rationalize that Bella's laziness and spendthrift ways are irrelevant to the decision at hand.
  - B) She might claim that she is not willing to pay for a housecleaner, hoping that Bella would pay the entire \$80.
  - C) She might offer to do Bella's housecleaning chores if Bella would pay her \$50.
  - D) She will come clean and tell Bella that since Bella is lazy and a spendthrift she should pay a bigger share of the \$80.

Answer: B

Diff: 2 Page Ref: 155–156

Topic: Private Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 21) The "tragedy of the commons" refers to the phenomenon where
- A) individuals are free riders.
  - B) people overuse a common resource.
  - C) people do not internalize an externality.
  - D) there is rivalry in consumption.

Answer: B

Diff: 1 Page Ref: 160

Topic: The Tragedy of the Commons

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 22) A tragedy of the commons occurs when a resource is
- A) rival and excludable.
  - B) rival and non-excludable.
  - C) non-rival and non-excludable.
  - D) non-rival and excludable.

Answer: B

Diff: 1 Page Ref: 160

Topic: The Tragedy of the Commons

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 23) Which of the following is an example of a common resource?

- A) catfish in a private pond in Mississippi
- B) impounded dogs in a dog pound
- C) public health care services in the United States
- D) sea otters in the coastal waters of the Pacific Ocean

Answer: D

Diff: 1 Page Ref: 160

Topic: Common Resources

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 24) Which of the following exemplifies the tragedy of the commons?

- A) Residents on the northern coast of California receive only one public broadcasting signal which may be eliminated altogether if government funding is cut.
- B) The Pleasant Hill community is growing so fast that the city's only post office is not able to keep pace with the population growth in the community.
- C) Canadian citizens receive free universal health care administered by provincial governments.
- D) The Malaysian tapir, distinguished for its unusual coloration, is a target for poachers who hunt it for its tough and leathery hide.

Answer: D

Diff: 2 Page Ref: 160

Topic: The Tragedy of the Commons

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 25) Consider the stock of ocean tuna which is massively overfished. It is rational for an individual to exploit the resource rather than to conserve the stock because

- A) the private benefit of harvesting tuna is higher than the social benefit of harvesting it.
- B) the private benefit of harvesting tuna is lower than the social benefit of harvesting it.
- C) the social cost of harvesting the fish is lower than the private cost.
- D) the private cost of harvesting the fish is lower than the social cost.

Answer: C



Diff: 2 Page Ref: 160

Topic: Social Cost

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

Figure 5-15

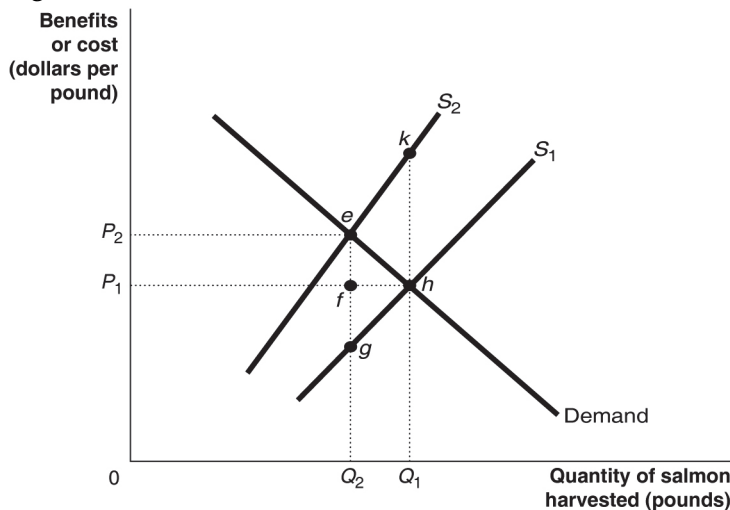


Figure 5-15 shows the market for Atlantic salmon, a common resource. The current market equilibrium output of  $Q_1$  is not the economically efficient output. The economically efficient output is  $Q_2$ .

- 26) *Refer to Figure 5-15.* The current market equilibrium output is partly the result of overfishing. In that case, what does  $S_1$  represent?

A) the private marginal benefit of harvesting salmon  
 B) the social marginal benefit of harvesting salmon  
 C) the private marginal cost of harvesting salmon  
 D) the social marginal cost of harvesting salmon

Answer: C

Diff: 2 Page Ref: 160-161

Topic: Private Cost

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 27) *Refer to Figure 5-15.* The current market equilibrium output is partly the result of overfishing. In that case, what does  $S_2$  represent?

A) the private marginal benefit of harvesting salmon  
 B) the social marginal benefit of harvesting salmon  
 C) the private marginal cost of harvesting salmon  
 D) the social marginal cost of harvesting salmon

Answer: D

Diff: 2 Page Ref: 160-161

Topic: Social Cost

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

28) Refer to Figure 5-15. Identify the area that shows the deadweight loss from overfishing.

- A) *egh*                      B) *ekh*                      C) *efh*                      D) *eghk*

Answer: B

Diff: 2      Page Ref: 160–161

Topic: Deadweight Loss

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

29) Overuse of a common resource may be avoided by all of the following methods *except*

- A) charging for the use of a common resource.  
 B) issuing tradable permits for the use of a common resource.  
 C) government taking over ownership of all private common resources.  
 D) setting quotas or legal limits on the quantity consumed of the common resource.

Answer: C

Diff: 2      Page Ref: 160–161

Topic: Common Resources

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

30) The tragedy of the commons was avoided in the Middle Ages by

- A) selling common grounds to individuals.  
 B) the local police who monitored entry into the commons.  
 C) social pressure to uphold traditionally accepted limits on family use of the commons.  
 D) the government which imposed a tax for the use of the commons.

Answer: C

Diff: 2      Page Ref: 160–161

Topic: The Tragedy of the Commons

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

31) The basic cause of deadweight losses from the existence of common resources and externalities is

- A) a lack of clearly defined and enforceable property rights.  
 B) the self interested rationality of human beings.  
 C) the use of a market system to deal with scarcity.  
 D) the absence of government intervention.

Answer: A

Diff: 2      Page Ref: 160–161

Topic: Deadweight Loss

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

32) Global warming refers to the effect of global pollutants such as carbon dioxide on climates on the earth. Climate-induced changes in temperatures affect, among other things, agriculture. Which of the following is a reason why policymakers are still debating if this problem should be addressed and how it should be addressed?

- A) Scientists agree about the damage caused by carbon emissions but disagree about the methods of reducing emissions.  
 B) The marginal cost of reducing carbon emissions is known with certainty but the marginal benefit from reduction is not known with certainty.

- C) The marginal cost of reducing carbon emissions is not known with certainty but the marginal benefit from reduction is known with certainty.
- D) There is much disagreement about all aspects of the problem: how much carbon emissions contribute to damage from climate change which in turn informs the benefits from reduction, and what methods to use which in turn determines the cost of reduction.

Answer: D

Diff: 2 Page Ref: 161

Topic: The Optimal Level of Pollution

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 33) Public goods are distinguished by two primary characteristics. What are they?

- A) nonrivalry and nonexcludability
- B) government intervention and low prices
- C) market failure and high prices
- D) rivalry and exclusivity

Answer: A

Diff: 1 Page Ref: 155

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 34) Goods can be classified on the basis of whether their consumption is

- A) internal and excludable.
- B) rival and competitive.
- C) includable and cooperative.
- D) rival and excludable.

Answer: D

Diff: 1 Page Ref: 154

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 35) Classifying a good as excludable means

- A) that someone can be barred from consuming the good based on race, creed or some other irrelevant characteristic.
- B) that anyone who does not pay for the good cannot consume it.
- C) that consumption of the good causes no externalities.
- D) that a producer with patent or copyright protection can exclude any other producer from selling his product.

Answer: B

Diff: 1 Page Ref: 154

Topic: Excludability

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

36) Classifying a good as rival means

- A) that the good is produced in a competitive market.
- B) that there is a shortage of the good.
- C) that when one person consumes a unit of the good no one else can consume it.
- D) anyone who does not pay for the good cannot consume it.

Answer: C

Diff: 1 Page Ref: 154

Topic: Rivalry

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

37) A private good is

- A) a good that is rivalrous and nonexcludable.
- B) a good that is nonrivalrous and nonexcludable.
- C) a good that is rivalrous and excludable.
- D) a good that is nonrivalrous and excludable.

Answer: C

Diff: 1 Page Ref: 154

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

38) A public good is

- A) a good that is rivalrous and excludable.
- B) good that is nonrivalrous and nonexcludable.
- C) a good that is nonrivalrous and excludable.
- D) a good that is rivalrous and nonexcludable.

Answer: B

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

39) All of the following are examples of public goods *except*

- A) broadcast television with commercials.
- B) clean water systems.
- C) stock of knowledge in the public domain.
- D) crime prevention.

Answer: B

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

40) Which of the following is an example of a nonexcludable product?

- A) college education
- B) a public library
- C) public transportation
- D) internet service for your home computer

Answer: B

Diff: 1 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

41) The free rider problem refers to a situation in which

- A) people consume a pure public good without payment, even though the good may not be produced if no one chooses to pay.
- B) the marginal cost of allowing additional consumers to consume a public good is zero.
- C) high income individuals subsidize the production of goods, such as education, that make society better off.
- D) markets fail to allocate resources efficiently when benefits outweigh costs.

Answer: A

Diff: 1 Page Ref: 155

Topic: Free Riding

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

42) Which of the following best illustrates the free rider problem?

- A) Since no one owns elephants and elephants are valued for their hide, meat and ivory, elephants can be hunted to extinction.
- B) For every purchase of a \$30 fare card, you are entitled to five free bus rides.
- C) If your neighbors professionally landscape their front yards, it is likely that the market value of your property will increase.
- D) All three homeowners in a quiet cul-de-sac have expressed the desirability of security lighting in the common parking area. One of the homeowners installs the lighting and asks you to contribute toward the cost. You choose not to contribute.

Answer: D

Diff: 2 Page Ref: 155

Topic: Free Riding

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

43) "Free riding" is a characteristic of which type of good?

- A) a private good
- B) a common resource
- C) a public good
- D) a good that is both rival and excludable

Answer: C

Diff: 2 Page Ref: 155

Topic: Free Riding

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 44) Parents who do not have their children immunized and attempt to benefit from other parents who did have their own children immunized are exhibiting an economic behavior known as
- A) excludability.
  - B) public rivalry.
  - C) free riding.
  - D) internalizing an external cost.

Answer: C

Diff: 1 Page Ref: 155

Topic: Free Riding

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 45) It is difficult for a private market to provide the economically efficient quantity of a public good because
- A) by law governments cannot use cost-benefit analysis to determine this quantity.
  - B) public goods produce positive and negative externalities.
  - C) individual preferences are not revealed in the market for the good.
  - D) it is too expensive to produce the necessary amount of the good.

Answer: C

Diff: 2 Page Ref: 156–158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 46) The supply curve of a public goods shows
- A) the total quantities that all producers are willing and able to supply at each price.
  - B) the maximum amount suppliers require to produce each quantity of the good.
  - C) the total cost of producing each unit of the good.
  - D) the marginal cost of producing each unit of the good.

Answer: D

Diff: 2 Page Ref: 158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 47) The efficient output level of a public good occurs where the
- A) greatest number of free riders occurs.
  - B) marginal cost of producing the last unit is equal to the marginal benefit realized by consumers.
  - C) total cost of production is affordable.
  - D) marginal cost of production is at its lowest.

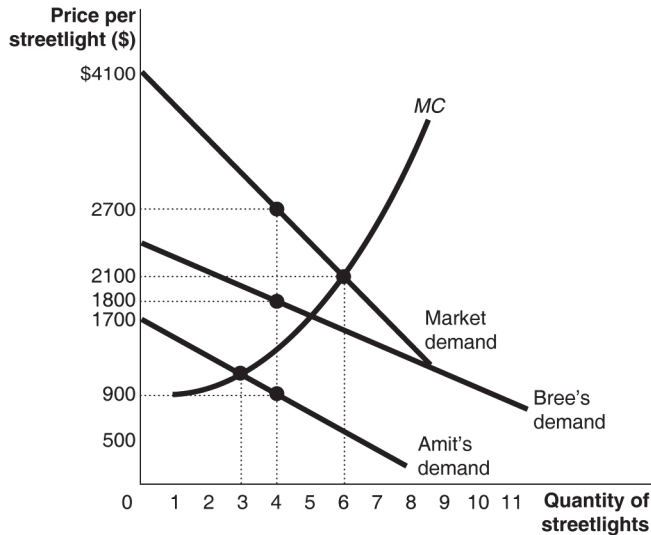
Answer: B

Diff: 2 Page Ref: 158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

**Figure 5-16**

Amit and Bree are the only two homeowners on an isolated private road. Both agree that installing street lights along the road would be beneficial and want to do so. Figure 5-16 shows their willingness to pay for different quantities of street lights, the market demand for street lights and the marginal cost of installing the street lights.

- 48) Refer to Figure 5-16. How much is Amit willing to pay to have 4 street lights installed?  
 A) \$3,600                      B) \$2,700                      C) \$1,800                      D) \$900

Answer: D

Diff: 1      Page Ref: 156-158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 49) Refer to Figure 5-16. How much is Bree willing to pay to have 4 street lights installed?  
 A) \$1,500                      B) \$1,800                      C) \$2,700                      D) \$7,200

Answer: B

Diff: 1      Page Ref: 156-158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 50) Refer to Figure 5-16. What is the optimal quantity of street lights to install?  
 A) 3                              B) 4                              C) 6                              D) 9

Answer: C

Diff: 3      Page Ref: 156-158

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 51) *Refer to Figure 5-16.* Suppose Amit and Bree know each other's preferences so that it is not possible for one to deceive the other. Which of the following statements best describes the circumstances under which the optimal quantity of street lights could be achieved?
- A) The optimal quantity will be installed only if the two parties agree to pay according to their willingness to pay as indicated by their respective demand curves.
  - B) Because there are only two consumers, it is likely that private bargaining will result in the optimal quantity being installed.
  - C) The optimal quantity will be installed only if the two parties split the cost of installation equally.
  - D) The optimal quantity will be installed only if Bree pays for the entire installation cost.

Answer: B

Diff: 3 Page Ref: 156–158

Topic: Public Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 52) Which of the following is an example of a common resource?
- A) elephants in the wild
  - B) lions in a zoo
  - C) a college education
  - D) public transportation

Answer: A

Diff: 1 Page Ref: 160

Topic: Common Resources

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 53) An important difference between the demand for a private good and the demand for a public good is that
- A) individuals reveal their preferences for a public good but they do not have to reveal their preferences a private good.
  - B) the resources used to provide public goods are common resources or government owned; the resources used to produce private goods are all privately owned.
  - C) individuals reveal their preferences for a private good but they do not have to reveal their preferences for a public good.
  - D) the demand for a private good produces consumption externalities; the demand for a public good produces production externalities.

Answer: C

Diff: 3 Page Ref: 154–155

Topic: Public Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 54) In England during the Middle Ages each village had an area of pasture on which any family in the village was allowed to graze its cows and sheep without charge. Eventually, the grass in the pasture would be depleted and no family's cow or sheep would get enough to eat. The reason the grass was depleted was
- A) the area of pasture was nonexcludable and the consumption of the grass was rival.
  - B) self-interest motives led livestock owners to raise too many cows and sheep.
  - C) due to a policy of neglect on the part of the English government.
  - D) it did not get enough rainfall.

Answer: A



Diff: 2 Page Ref: 160

Topic: *The Tragedy of the Commons*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 55) Haiti was once a heavily forested country. Today, 80 percent of Haiti's forests have been cut down, primarily to be burned to create charcoal. The reduction in the number of trees has lead to devastating floods when it rains heavily. This is an example of
- A) tragic externalities.
  - B) the tragedy of the commons.
  - C) human greed.
  - D) the consequences of not having a market economic system.

Answer: B

Diff: 1 Page Ref: 160

Topic: *The Tragedy of the Commons*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 56) Negative externalities and the tragedy of the commons are problems that have a common source. What is this common source?
- A) self-interest motives of producers and consumers
  - B) a lack of concern for human rights
  - C) a lack of competition
  - D) a lack of clearly defined and enforced property rights

Answer: D

Diff: 1 Page Ref: 160

Topic: *The Tragedy of the Commons*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 57) Which of the following is a possible solution when a scarce resource is subject to the tragedy of the commons?
- A) access to the commons can be restricted through community norms and laws
  - B) offer subsidies to consumers
  - C) force people to move away from the commons
  - D) persuade people to use less of the scarce resource through an advertising campaign

Answer: A

Diff: 2 Page Ref: 160

Topic: *The Tragedy of the Commons*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 58) If the United States and other developed nations pay the cost of reducing public emissions, developing nations such as China could benefit from the reduction while not contributing to it. In this sense, one can think of reducing carbon emissions as being like a

A) public good.

B) private good.

C) quasi-private good.

D) quasi-public good.

Answer: A

Diff: 2      Page Ref: 155

*Topic: Public Goods*

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 59) A product is considered to be excludable if it is jointly owned by all members of a community.

Answer: FALSE

Diff: 1      Page Ref: 154

Topic: Excludability

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 60) A quasi-public good is similar to a public good in that one person's consumption of the quasi-public good does not reduce the amount available for everyone else.

Answer: TRUE

Diff: 2      Page Ref: 155

Topic: Categories of Goods

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 61) A quasi-public good differs from a public good in that unlike a public good, it is possible to keep out those who do not pay for the quasi-public good from enjoying the benefits of the good.

Answer: TRUE

Diff: 2      Page Ref: 155

Topic: Categories of Goods

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 62) A public good that is a good that is both rival and excludable.

Answer: FALSE

Diff: 1      Page Ref: 155

Topic: Public Goods

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 63) The social benefit of a given level of a public good is the vertical sum of all private benefits for that level.

Answer: TRUE

Diff: 1      Page Ref: 155-156

Topic: Public Goods

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

AACSB: Analytic thinking

- 64) A modern example of the tragedy of the commons is the forests in many poor countries.

Answer: TRUE

Diff: 1 Page Ref: 160

Topic: *The Tragedy of the Commons*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 65) Goods differ on the basis of whether their consumption is rival and excludable. Explain the terms "rivalry" and "excludability" as they are used to define goods. List the four categories of goods, and define these categories in terms of rivalry and excludability.

Answer: Rivalry occurs when one person's consuming a unit of a good means no one else can consume it. Excludability means that anyone who does not pay for a good cannot consume it.

1. Private good: rival and excludable
2. Public good: nonrivalrous and nonexcludable
3. Quasi-public good: nonrivalrous and excludable
4. Common resource: rival and nonexcludable

Diff: 2 Page Ref: 154

Topic: *Public Goods*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 66) Determine if each of the products below displays any of the following characteristics:

- (i) rivalry
- (ii) nonrivalry
- (iii) excludability
- (iv) nonexcludability.

- a. a freeway during peak commute hours
- b. an online college course
- c. infectious disease prevention
- d. open source software such as Linux
- e. a movie showing at Century Theatres

Answer: a. rivalry due to traffic congestion although entry into the freeway is nonexcludable  
 b. nonrival but excludable because those who did not pay for the course may not take the course  
 c. nonrival and nonexcludable  
 d. nonrival and nonexcludable  
 e. nonrival but excludable since admission requires purchase of a ticket

Diff: 2 Page Ref: 154

Topic: *Categories of Goods*

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 67) "When it comes to public goods, individuals do not reveal their true preferences because it is not in their self interest to do so." Evaluate this statement.

Answer: The statement is true. For example, in the case of a private good such as a hamburger, a consumer either reveals her willingness to pay by purchasing the good at the market price or goes without it. This is not the case with a public good. Once produced, individuals cannot be excluded from consuming the good even if they have not paid for the good. Therefore, it is in a consumer's interest not to reveal her true preferences for the good.

Diff: 3 Page Ref: 155

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 68) State whether each of the following goods and services is nonrival, nonexcludable or both:

- a. A toll road
- b. A public park
- c. A lighthouse
- d. An art museum
- e. A radio broadcast of "A Prairie Home Companion"

Answer: a. Nonrival, although rivalry could exist during traffic congestion.  
 b. Both, although rivalry could exist under some circumstances, such as when there is a sporting event or a private party.  
 c. Both  
 d. Nonrival and excludable if admission requires the purchase of a ticket.  
 e. Both

Diff: 2 Page Ref: 154

Topic: Public Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 69) How does a public good differ from a quasi-public good? In your answer give an example of each type of good.

Answer: A public good is: (a) nonrivalrous – one person's consumption of the good does not prevent anyone else from consuming it; (b) nonexcludable – anyone can consume the good without paying for it. An example of a public good is national defense. A quasi-public good is excludable, but nonrival. This means that people who do not pay for the good do not consume it, but one's person's consumption does not affect the consumption of anyone else. An example of a quasi-public good is a toll road.

Diff: 2 Page Ref: 155

Topic: Categories of Goods

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 70) Explain how the decision by parents to not immunize their children, hoping that their children will not get sick because other parents have had their children immunized, is an example of free riding. How is this behavior dangerous to the public?

Answer: Free riding is benefiting from a good without paying for it. Parents who do not get their children immunized, and instead assume their children will not get sick because all the other children that their own kids will be in contact with have been immunized, are attempting to benefit from the vaccinations of other children without paying for their own kids' vaccinations. This behavior is dangerous to the public because the likelihood of an unvaccinated child catching and spreading a disease is much greater than that of a child who has been vaccinated.

*Diff: 2      Page Ref: 155*

*Topic: Free Riding*

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

*AACSB: Analytic thinking*

- 71) Define the tragedy of the commons. Give three examples of common resources. Briefly explain why common property resources are subject to overuse.

Answer: The tragedy of the commons refers to situations where common resources are subject to overuse and pollution. Examples include forest land, pasture land, fish in the ocean, lions in the wild, shrimp population in the gulf states, a public library, and space on a public beach. Common resources are subject to overuse because each individual captures the private benefit fully but only bears part of the cost of using the resource. As a result, each individual has no incentive to maintain the quality or purity of the resource.

*Diff: 2      Page Ref: 160*

*Topic: The Tragedy of the Commons*

*Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.*

*AACSB: Analytic thinking*

72)

**Table 5-1**

Number of Acres	Deidre's Willingness to Pay (dollars)	Eugene's Willingness to Pay (dollars)	Farhad's Willingness to Pay (dollars)	Marginal Social Benefit (dollars)
1	\$180	\$140	\$150	
2	160	130	130	
3	140	120	110	
4	120	110	90	
5	100	100	70	
6	80	90	50	
7	60	80	30	
8	40	70	20	

In an effort to maintain privacy and enhance property values, three homeowners, Deidre, Eugene Farhad, are considering leasing a portion of adjoining vacant land for a private park. Table 5-1 shows each person's willingness to pay for each quantity of the land.

- Complete the column in Table 5-1.
- Graph the marginal social benefit curve.
- Suppose the landowner is willing to lease a portion of her land according to the following supply schedule given in Table 5-2. On the same diagram, graph the supply curve.

**Table 5-2**

Number of Acres	Price per Acre (dollars)
1	\$260
2	280
3	300
4	320
5	340
6	360
7	380
8	400

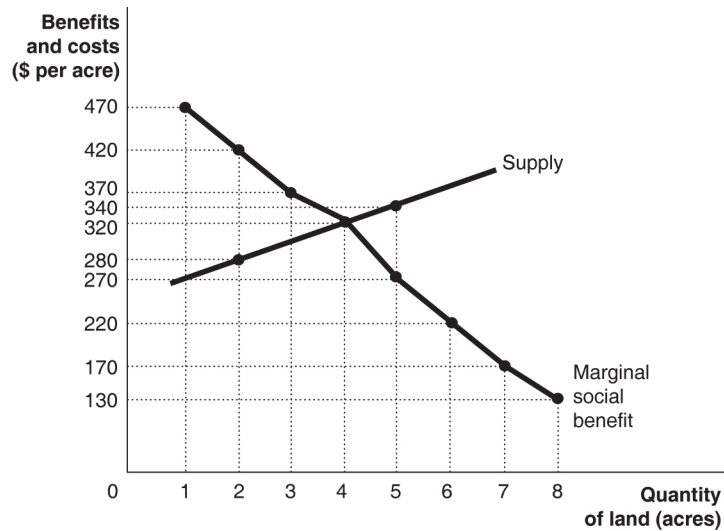
- What is the optimal quantity of land that homeowners should lease? Explain your answer.
- Explain why a park of 5 acres is not optimal.

Answer: a.

Answer: *Table 5-1*

Number of Acres	Deidre's Willingness to Pay (dollars)	Eugene's Willingness to Pay (dollars)	Farhad's Willingness to Pay (dollars)	Marginal Social Benefit (dollars)
1	180	140	150	470
2	160	130	130	420
3	140	120	110	370
4	120	110	90	320
5	100	100	70	270
6	80	90	50	220
7	60	80	30	170
8	40	70	20	130

b and c.



d. The optimal quantity of land that homeowners should lease is 4 acres, given by the intersection of the marginal social benefit curve and the marginal cost (supply) curve.

e. A park of 5 acres is not optimal because the marginal benefit of the 5th acre to the homeowners is \$270 while the cost of leasing the 5th acre is \$340.

Diff: 3 Page Ref: 158–159

Topic: Private Goods

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

# Chapter 6

## Elasticity: The Responsiveness of Demand and Supply

### 6.1 The Price Elasticity of Demand and Its Measurement

- 1) Price elasticity of demand measures
- A) how responsive suppliers are to price changes.
  - B) how responsive sales are to changes in the price of a related good.
  - C) how responsive quantity demanded is to a change in price.
  - D) how responsive sales are to a change in buyers' incomes.

Answer: C

Diff: 1 Page Ref: 172

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 2) Suppose the value of the price elasticity of demand is  $-3$ . What does this mean?
- A) A 1 percent increase in the price of the good causes quantity demanded to increase by 3 percent.
  - B) A 1 percent increase in the price of the good causes quantity demanded to decrease by 3 percent.
  - C) A 3 percent increase in the price of the good causes quantity demanded to decrease by 1 percent.
  - D) A \$1 increase in price causes quantity demanded to fall by 3 units.

Answer: B

Diff: 1 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 3) If the percentage increase in price is 15 percent and the value of the price elasticity of demand is  $-3$ , then quantity demanded
- A) will increase by 45 percent.
  - B) will increase by 5 percent.
  - C) will decrease by 45 percent.
  - D) will decrease by 5 percent.

Answer: C

Diff: 2 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 4) The price elasticity of demand for Stork ice cream is  $-4$ . Suppose you're told that following a price increase, quantity demanded fell by 10 percent. What was the percentage change in price that brought about this change in quantity demanded?

A) 40 percent      B) 25 percent      C) 2.5 percent      D) 0.4 percent

Answer: C

Diff: 2      Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 5) If demand is inelastic, the absolute value of the price elasticity of demand is

A) one.  
 B) less than one.  
 C) greater than one.  
 D) greater than the absolute value of the slope of the demand curve.

Answer: B

Diff: 1      Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 6) A demand curve which is \_\_\_\_\_ represents perfectly inelastic demand, and a demand curve which is \_\_\_\_\_ represents inelastic demand.

A) downward sloping; vertical      B) horizontal; downward sloping  
 C) vertical; downward sloping      D) upward sloping; horizontal

Answer: C

Diff: 1      Page Ref: 178

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 7) If demand is perfectly inelastic, the absolute value of the price elasticity of demand is

A) zero.  
 B) less than one.  
 C) more than one.  
 D) equal to the absolute value of the slope of the demand curve.

Answer: A

Diff: 1      Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 8) Jenna runs a small boutique in Capitola. She tells one of her suppliers that she is willing to pay \$6 for a pair of wool hand warmers and not a dime more. On the basis of this information, what can you conclude about her price elasticity of demand for wool hand warmers?

A) It is elastic. B) It is perfectly elastic.  
C) It is perfectly inelastic. D) The price elasticity coefficient is 0.

Answer: B

Diff: 1 Page Ref: 176

Topic: Perfectly Elastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 9) Seth is a competitive body builder. He says he has to have his 12-oz package of protein powder to "feed his muscles" every day. On the basis of this information, what can you conclude about his price elasticity of demand for protein powder?

A) It is elastic. B) It is perfectly elastic.  
C) It is perfectly inelastic. D) The price elasticity coefficient is 0.

Answer: C

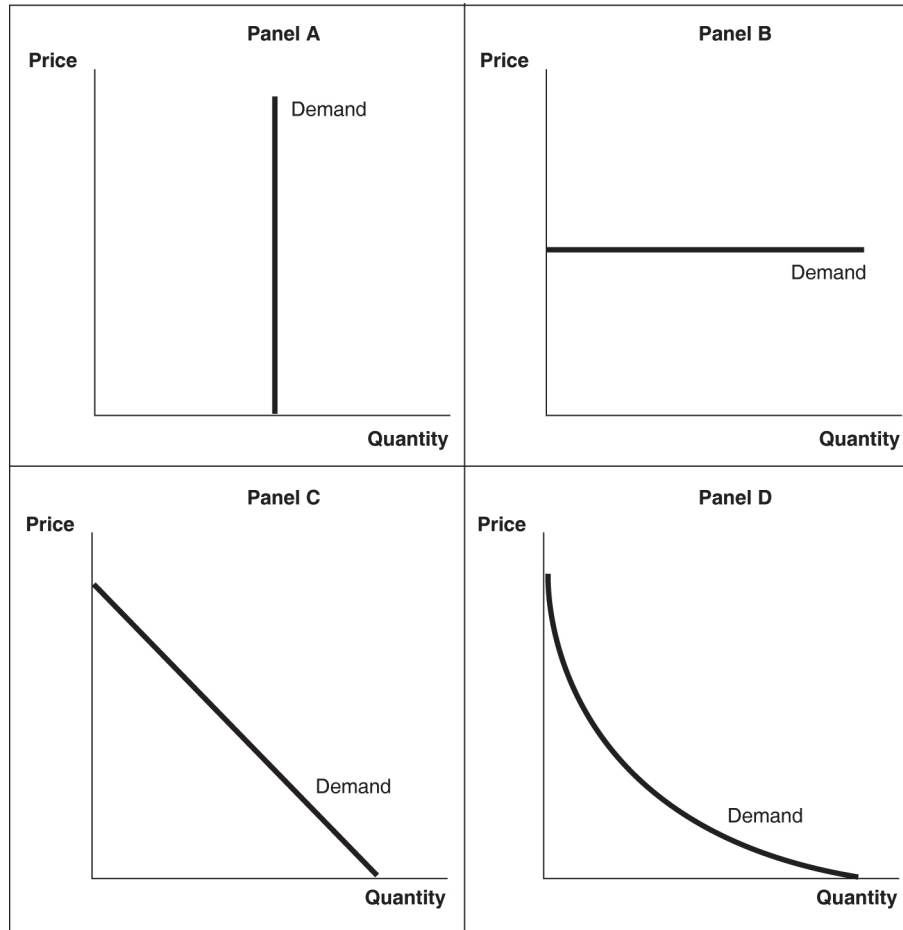
Diff: 1 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-1



- 10) Refer to Figure 6-1. The demand curve on which elasticity changes at every point is given in
- A) Panel A.
  - B) Panel B.
  - C) Panel C.
  - D) none of the above graphs.

Answer: C

Diff: 1 Page Ref: 177

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 11) Refer to Figure 6-1. A perfectly elastic demand curve is shown in
- A) Panel A.
  - B) Panel B.
  - C) Panel C.
  - D) Panel D.

Answer: B

Diff: 1 Page Ref: 177

Topic: Perfectly Elastic Demand

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

12) Refer to Figure 6-1. A perfectly inelastic demand curve is shown in

- A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 1      Page Ref: 177

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

13) In September 2012, the average price of gasoline in the United States was \$3.91 per gallon and consumers bought 5 percent less gasoline than they had during September 2011, when the average price was \$3.66 per gallon. Based on these numbers, what was the price elasticity of demand for gasoline from September 2011 to September 2012?

- A) -0.33                      B) -0.76                      C) -2.96                      D) -6.75

Answer: B

Diff: 2      Page Ref: 174

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

14) If 50 units are sold at a price of \$20 and 80 units are sold at a price of \$15, what is the absolute value of the price elasticity of demand? Use the midpoint formula.

- A) 0.17                      B) 0.62                      C) 1.62                      D) 5

Answer: C

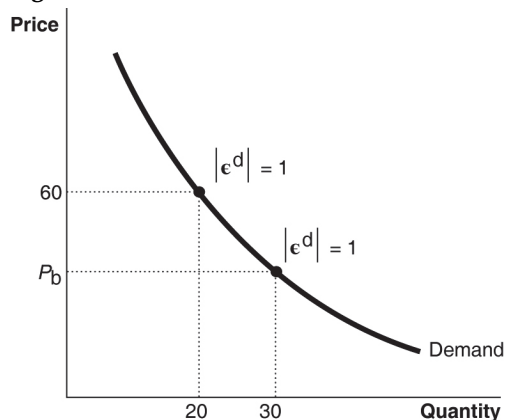
Diff: 3      Page Ref: 175-176

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-2



15) Refer to Figure 6-2. The absolute value of the price elasticity of demand at points *a* and *b* is 1.

What is the value of  $P_b$ ?

- A) \$50                      B) \$40                      C) \$30                      D) \$20

Answer: B

Diff: 2 Page Ref: 174

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) Suppose a hurricane decreased the supply of oranges so that the price of oranges rose from \$120 a ton to \$180 a ton and quantity sold decreased from 800 tons to 240 tons. What is the absolute value of the price elasticity of demand?

A) 0.11                      B) 0.37                      C) 2.69                      D) 9.33

Answer: C

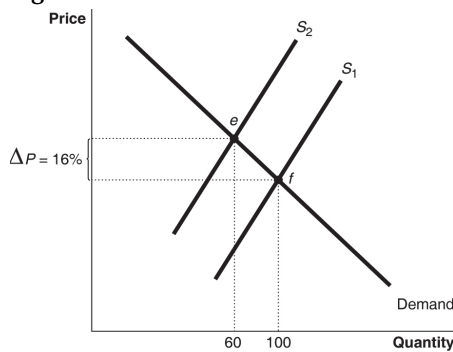
Diff: 2 Page Ref: 175-176

Topic: The Midpoint Formula

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

Figure 6-3



- 17) Refer to Figure 6-3. Using the midpoint formula, calculate the absolute value of the price elasticity of demand between *e* and *f*.

A) 0.32                      B) 0.4                      C) 2.5                      D) 3.125

Answer: D

Diff: 2 Page Ref: 175-176

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 18) Jaycee Jeans sold 40 pairs of jeans at a price of \$40. When it lowered its price to \$20, the quantity sold increased to 60 pairs. Calculate the absolute value of the price elasticity of demand. Use the midpoint formula.

A) 1.67                      B) 1.0                      C) 0.6                      D) 0.53

Answer: C

Diff: 2 Page Ref: 175-176

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 19) Which of the following statements about price elasticity of demand is *false*?
- A) The value of the price elasticity of demand is the reciprocal of the value of the demand curve's slope.
  - B) If quantity demanded changes by a larger percentage than the percentage change in price, demand is elastic.
  - C) The value of the price elasticity of demand along a downward-sloping demand curve is always negative.
  - D) A linear downward-sloping demand curve has a varying price elasticity coefficient.

Answer: A

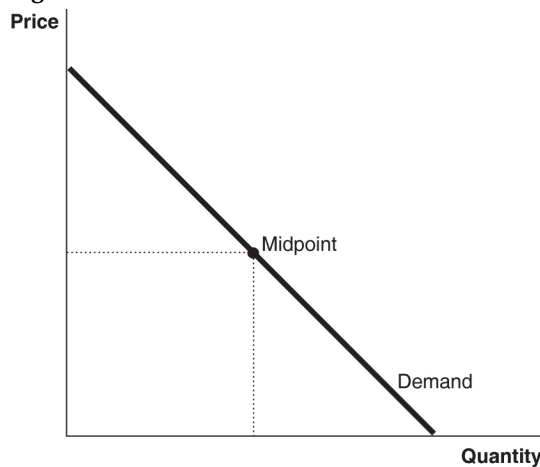
Diff: 3 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

**Figure 6-4**



- 20) Refer to Figure 6-4. Which of the following statements is true about the price elasticity of demand?
- A) The elasticity coefficient is constant along the demand curve.
  - B) The elastic portion of a straight-line downward sloping demand curve corresponds to the segment above the midpoint.
  - C) The inelastic portion of the demand curve corresponds to the segment above the midpoint.
  - D) At the midpoint of the demand curve, the elasticity coefficient is zero.

Answer: B

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

21) **Refer to Figure 6-4.** The inelastic segment of the demand curve

- A) is coincident with the horizontal axis.
- B) is coincident with the vertical axis.
- C) lies below the midpoint of the curve.
- D) lies above the midpoint of the curve.

Answer: C

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

22) **Refer to Figure 6-4.** At the midpoint of the demand curve, in absolute value

- A) the price elasticity coefficient is at a maximum.
- B) the price elasticity coefficient is at a minimum.
- C) the price elasticity coefficient is zero.
- D) the price elasticity coefficient is one.

Answer: D

Diff: 1 Page Ref: 173

Topic: Unit-Elastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

23) Which of the following statements is true about the price elasticity of demand along a downward sloping linear demand curve?

- A) It is inelastic at high prices and elastic at low prices.
- B) It is unit-elastic throughout the demand curve.
- C) It is elastic at high prices and inelastic at low prices.
- D) It is perfectly elastic at very high prices and perfectly inelastic at very low prices.

Answer: C

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

24) If, for a given percentage increase in price, quantity demanded falls by a proportionately smaller percentage, then demand is

- A) unit-elastic.
- B) perfectly elastic.
- C) relatively inelastic.
- D) relatively elastic.

Answer: C

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 25) If a 35 percent increase in price of golf balls led to an 42 percent decrease in quantity demanded, then the demand for golf balls is
- A) unit-elastic.
  - B) perfectly elastic.
  - C) relatively inelastic.
  - D) relatively elastic.

Answer: D

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 26) Facing stiff competition, Hendrix College, a small liberal arts institution in Conway, Ark., decided two years ago to bolster its academic offerings, promising students at least three hands-on experiences outside the classroom, including research, internships and service projects. Although it raised tuition and fees by 29 percent, enrollment in the freshman class rose by 37 percent.

Source: Jonathan D. Glater and Alan Finder, "In New Twist on Tuition Game, Popularity Rises With the Price," *New York Times*, December 12, 2006

Based on the information above, the demand for Hendrix College education is

- A) unit-elastic.
- B) perfectly elastic.
- C) relatively inelastic.
- D) More information is needed to answer the question.

Answer: C

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 27) If the demand for a life-saving drug was perfectly inelastic and the price doubled, the quantity demanded would
- A) also double.
  - B) decrease by 50%.
  - C) be cut in half.
  - D) remain constant.

Answer: D

Diff: 2 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 28) At a price of \$100, Beachside Canoe Rentals rented 11 canoes. When it increased its rental price to \$125, 9 canoes were rented. Calculate the absolute value of the price elasticity of demand for canoe rentals, using the midpoint formula.

A) 2                                      B) 1.25                                      C) 0.9                                      D) 0.75

Answer: C

Diff: 3      Page Ref: 175–176

Topic: The Midpoint Formula

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 29) Consider the following types of demand curves:

- a. a vertical demand curve
- b. a horizontal demand curve
- c. a linear downward-sloping demand curve

Which of the demand curves listed exhibits a price elasticity of demand coefficient that remains constant along the demand curve?

A) a only                                      B) b only                                      C) a and b only                                      D) a, b, and c

Answer: C

Diff: 2      Page Ref: 177

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 30) If at a price of \$24, Octavia sells 36 home-grown orchids and at \$30 she sells 24 home-grown orchids, the demand for her orchids is

A) elastic.                                      B) inelastic.  
C) unit-elastic.                                      D) perfectly elastic.

Answer: A

Diff: 3      Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 31) If at a price of \$50, Ghani sells 20 hand-made leather cell-phone covers but at a price of \$60, zero units are sold. Based on this information, the demand for his cell-phone covers is

A) elastic or perfectly inelastic.                                      B) elastic or perfectly elastic.  
C) unit-elastic.                                      D) perfectly inelastic.

Answer: B

Diff: 2      Page Ref: 176–177

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 32) At a price of \$8 per dozen, Chuy sells 40 dozen homemade tamales per week. When he raised her price to \$12 per dozen, he still sold 40 dozen per week. Based on this information, the demand for his tamales is

A) perfectly elastic. B) inelastic.  
C) perfectly inelastic. D) unit-elastic.

Answer: C

Diff: 2 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 33) For consumers who opt to pay a \$10 monthly fee to have unlimited texting on their cell phones, but choose not to pay a \$5 monthly fee to have unlimited call minutes, the unlimited texting option has a \_\_\_\_\_ than the unlimited minutes option.

A) higher price elasticity of demand B) higher cross-price elasticity of demand  
C) lower price elasticity of demand D) lower cross-price elasticity of demand

Answer: C

Diff: 2 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 34) Economists use the concept of \_\_\_\_\_ to measure how one economic variable, such as quantity, responds to a change in another economic variable, such as price.

A) slope B) efficiency C) relativity D) elasticity

Answer: D

Diff: 1 Page Ref: 172

Topic: Elasticity

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 35) The price elasticity of demand is equal to

A) the value of the slope of the demand curve.  
B) the change in quantity demanded divided by the change in price.  
C) the percentage change in price divided by the percentage change in quantity demanded.  
D) the percentage change in quantity demanded divided by the percentage change in price.

Answer: D

Diff: 1 Page Ref: 172

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 36) In September 2012, the average price of gasoline in the United States was \$3.91 per gallon, and consumers purchased nearly 5 percent less gasoline than they had during September 2011, when the average price of gasoline was \$3.66 per gallon. Based on these figures, from September 2011 to September 2012, the demand for gasoline was

A) elastic. B) inelastic.  
C) unit elastic. D) perfectly elastic.

Answer: B

Diff: 1 Page Ref: 171

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 37) To calculate the price elasticity of demand we divide
- A) the percentage change in quantity demanded by the percentage change in price.
  - B) the percentage change in price by the percentage change in quantity demanded.
  - C) rise by the run.
  - D) the average price by the average quantity demanded.

Answer: A

Diff: 1 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 38) The slope of a demand curve is *not* used to measure the price elasticity of demand because
- A) the slope of a linear demand curve is not constant.
  - B) the slope of a line cannot have a negative value.
  - C) the measurement of slope is sensitive to the units chosen for price and quantity.
  - D) the slope of the demand curve does not tell us how much quantity changes as price changes.

Answer: C

Diff: 1 Page Ref: 174

Topic: Price Elasticity and the Slope of a Demand Curve

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 39) If the slope of a demand curve is equal to  $-0.1$  then
- A) demand is inelastic.
  - B) we don't know whether the demand is elastic or inelastic.
  - C) the demand is elastic at low prices and inelastic at high prices.
  - D) as price increases by 10 percent quantity demanded decreases by 1 percent.

Answer: B

Diff: 2 Page Ref: 174

Topic: Price Elasticity and the Slope of a Demand Curve

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 40) The price elasticity of demand for beef is estimated to be 0.60 (in absolute value). This means that a 20 percent increase in the price of beef, holding every thing else constant, will cause the quantity of beef demanded to
- A) decrease by 12 percent.
  - B) decrease by 26 percent.
  - C) decrease by 32 percent.
  - D) decrease by 60 percent.

Answer: A

Diff: 2 Page Ref: 173

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 41) If the absolute value of the price elasticity of demand for aspirin equals 0.8 then
- A) aspirin is a normal good.
  - B) the demand for aspirin is inelastic.
  - C) aspirin has few substitutes.
  - D) the demand for aspirin is elastic.

Answer: B

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 42) If demand is perfectly elastic, the absolute value of the price elasticity coefficient is
- A) infinity.
  - B) zero.
  - C) more than one.
  - D) equal to the absolute value of the slope of the demand curve.

Answer: A

Diff: 1 Page Ref: 176

Topic: Perfectly Elastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 43) When the price of tortilla chips rose by 10 percent, the quantity of tortilla chips sold fell 4 percent. This indicates that the demand for tortilla chips is
- A) inelastic.
  - B) elastic.
  - C) unit-elastic.
  - D) perfectly inelastic.

Answer: A

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 44) A linear downward sloping demand curve has price elasticities (in absolute values) that
- A) increase as price decreases.
  - B) remain constant along the demand curve.
  - C) decrease as price decreases.
  - D) are greater than or equal to 1.

Answer: C

Diff: 1 Page Ref: 174

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 45) Carrie Bradshaw claims that when it comes to buying shoes, "price is no object." If this is true, then her demand for shoes is
- A) perfectly elastic.
  - B) perfectly inelastic.
  - C) unit-elastic.
  - D) horizontal.

Answer: B

Diff: 1 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 46) If the price elasticity of demand for insulin is equal to zero then the demand curve for insulin is
- A) horizontal.
  - B) downward sloping.
  - C) curvilinear.
  - D) vertical.

Answer: D

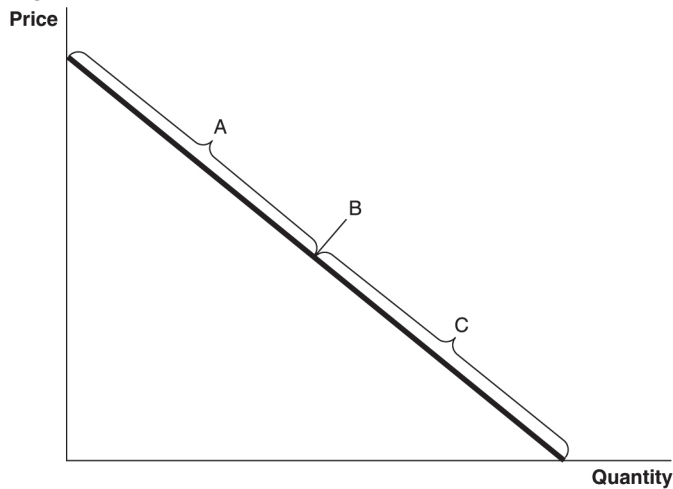
Diff: 1 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-5



- 47) Refer to Figure 6-5. The section of the demand curve labeled "A" represents
- A) the inelastic section of the demand curve.
  - B) the unit-elastic section of the demand curve.
  - C) the elastic section of the demand curve.
  - D) the perfectly elastic section of the demand curve.

Answer: C

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

48) If the demand for iPods is price elastic, then

- A) the percentage change in quantity demanded is greater than the percentage change in price (in absolute value).
- B) the percentage change in quantity demanded is less than the percentage change in price (in absolute value).
- C) the percentage change in quantity demanded is equal to the percentage change in price.
- D) quantity demanded is not responsive to changes in price.

Answer: A

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

49) If the demand for a steak is unit-elastic, then

- A) the percentage change in quantity demanded is 1 percent greater than the percentage change in price.
- B) the percentage change in quantity demanded is equal to the percentage change in price.
- C) the percentage change in quantity demanded is 100 percent greater than the percentage change in price (in absolute value).
- D) quantity demanded does not respond to changes in price.

Answer: B

Diff: 2 Page Ref: 173

Topic: Unit-Elastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

50) If the demand for cell phone service is inelastic, then

- A) the percentage change in quantity demanded is greater than the percentage change in price (in absolute value).
- B) the percentage change in quantity demanded is equal to the percentage change in price.
- C) the quantity demanded does not change in response to changes in price.
- D) the percentage change in quantity demanded is less than the percentage change in price (in absolute value).

Answer: D

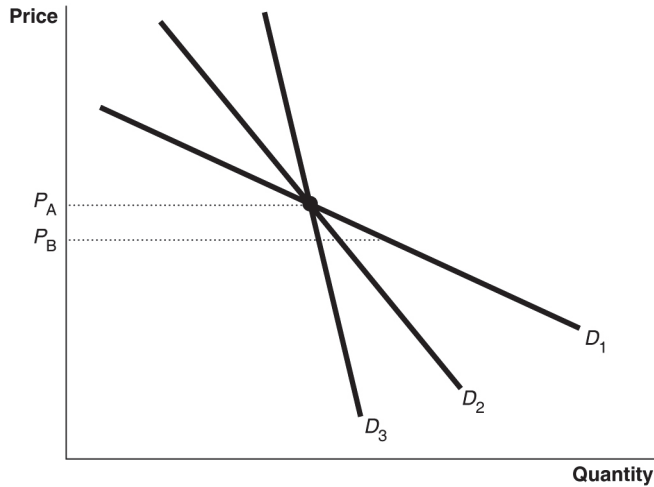
Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-6



- 51) Refer to Figure 6-6. As price falls from  $P_A$  to  $P_B$ , the quantity demanded increases most along  $D_1$ ; therefore,
- A)  $D_1$  is unit elastic.
  - B)  $D_1$  is more inelastic than  $D_2$  or  $D_3$ .
  - C)  $D_1$  is more elastic than  $D_2$  or  $D_3$ .
  - D)  $D_1$  is elastic at  $P_A$  but inelastic at  $P_B$ .

Answer: C

Diff: 2 Page Ref: 174

Topic: Price Elasticity and the Slope of a Demand Curve

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 52) The midpoint formula is used to measure the elasticity of demand between two points on a demand curve
- A) when demand is elastic.
  - B) in special cases when the percentage change in the quantity demanded is equal to the percentage change in price.
  - C) to ensure that the elasticity has a negative value.
  - D) to ensure that we have only one value of the price elasticity of demand between two points on a demand curve.

Answer: D

Diff: 1 Page Ref: 174

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 53) When the price of pistachio nuts is \$7.50 per lb. the quantity demanded is 48 lbs. When the price of peaches is \$9.00 per lb. the quantity demanded is 40 lbs. When the midpoint formula is used to measure the price elasticity of demand we can say that the demand for pistachio nuts is
- A) relatively, but not perfectly, elastic.
  - B) unit-elastic.
  - C) completely inelastic.
  - D) relatively, but not perfectly, inelastic.

Answer: B

*Diff: 3 Page Ref: 174*

*Topic: The Midpoint Formula*

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

- 54) Assume that when the price of cantaloupes is \$2.50 the demand for cantaloupes is unit-elastic, and that the demand curve for cantaloupes is linear and downward sloping. If firms lower the price of cantaloupes to \$2.00 which of the following statements can be made regarding the price elasticity of demand for cantaloupes?

- A) The demand for cantaloupes at \$2.00 must be inelastic.
- B) We cannot determine whether the demand for cantaloupes is elastic or inelastic without knowing what the quantity demanded is at each price.
- C) The demand for cantaloupes at \$2.00 must be elastic.
- D) The demand for cantaloupes at \$2.00 must be unit-elastic.

Answer: A

*Diff: 2 Page Ref: 173*

*Topic: Elastic and Inelastic Demand*

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

- 55) Assume that the demand curve for sunblock is linear and downward sloping. Which of the following statements about the slope of the demand curve for sunblock and the price elasticity of demand for sunblock are *true*?

- A) The slope and the price elasticity of demand are constant at all points along the demand curve for sunblock.
- B) The slope is constant, but the price elasticity of demand is not constant at all points along the demand curve for sunblock.
- C) The slope is not constant, but the price elasticity of demand is constant at all points along the demand curve for sunblock.
- D) The slope of the demand curve for sunblock is constant and equal to zero; demand is perfectly inelastic.

Answer: B

*Diff: 2 Page Ref: 174*

*Topic: Price Elasticity and the Slope of a Demand Curve*

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

- 56) If the percentage change in the quantity of teapots demanded is greater than the percentage change in the price of teapots, then

- A) the price elasticity of demand for teapots is greater than 1 in absolute value.
- B) the demand for teapots is unit-elastic.
- C) the price elasticity of demand for teapots is equal to zero.
- D) the price elasticity of demand for teapots is less than 1 in absolute value.

Answer: A

*Diff: 2 Page Ref: 172-173*

*Topic: Price Elasticity of Demand*

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*



57) We should never assume that an inelastic demand curve is a perfectly inelastic demand curve because

- A) there has never been evidence of a perfectly inelastic demand curve.
- B) an inelastic demand curve may be perfectly inelastic at some times but not others.
- C) perfectly inelastic demand curves are rare.
- D) an inelastic demand curve may be elastic at high prices.

Answer: C

Diff: 1 Page Ref: 178

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

**Table 6-1**

Price	Quantity
\$35	40
25	50

58) *Refer to Table 6-1.* Suppose you own a bookstore. You believe that you can sell 40 copies per day of the latest John Grisham novel when the price is \$35. You consider lowering the price to \$25 and believe this will increase the quantity sold to 50 books per day. Compute the price elasticity of demand using the mid-point formula and these data. Select the correct implication from your work.

- A) The demand for the John Grisham book is inelastic. Revenue will fall if the price is lowered.
- B) The demand for the John Grisham book is elastic. Revenue will rise if the price is lowered.
- C) The demand for the John Grisham book is inelastic. Revenue will rise if the price is lowered.
- D) The demand for the John Grisham book is elastic. Revenue will fall if the price is lowered.

Answer: A

Diff: 3 Page Ref: 175-176

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

59) Of the following, which is the best example of good with a perfectly inelastic demand?

- A) the demand for tickets in New York City when the Mets or Yankees are in the World Series
- B) the demand for gasoline
- C) a diabetic's demand for insulin
- D) the demand for a college education by a student who has a full scholarship to an Ivy League school

Answer: C

Diff: 1 Page Ref: 176

Topic: Perfectly Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

60) A perfectly elastic demand curve is

- A) vertical.
- B) horizontal.
- C) curvilinear.
- D) upward sloping.

Answer: B

Diff: 1 Page Ref: 176

Topic: Perfectly Elastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

61) A newspaper story on the effect of higher milk prices on the market for ice cream contained the following:

"As a result [of the increase in milk prices], retail prices for ice cream are up 4 percent from last year. . . . And ice cream consumption is down 3 percent."

Source: John Curran, "Ice Cream, They Scream: Milk Fat Costs Drive Up Ice Cream Prices," Associated Press, July 23, 2001.

Based on the information given, what is the price elasticity of demand for ice cream?

- A) 0.75 (in absolute value)
- B) 1.33 (in absolute value)
- C) 12%
- D) We do not have enough information to calculate the elasticity.

Answer: A

Diff: 2 Page Ref: 175–176

Topic: Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

62) Suppose that when the price per ream of recycled printer paper rises from \$4 to \$4.50, the quantity demanded falls from 800 to 600 reams per day. Using the midpoint formula, what is the price elasticity of demand (in absolute value) over this range?

- A) 0.003
- B) 0.41
- C) 2.43
- D) 4

Answer: C

Diff: 3 Page Ref: 175–176

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

63) The demand for gasoline is perfectly inelastic because most people need gasoline to drive their cars.

Answer: FALSE

Diff: 1 Page Ref: 178

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 64) If the demand for a product is elastic, the quantity demanded changes by a larger percentage than the percentage change in price.

Answer: TRUE

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 65) If, when price changes by 35 percent, the quantity demanded changes by 7 percent, then the absolute value of the price elasticity of demand is 5.

Answer: FALSE

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 66) Suppose at a price of \$50, Yoshi's Jazz Bar sells 20 tickets to its nightly jazz performance and at a price of \$40, it sells 25 tickets. Based on this information, the demand for Yoshi's jazz performance is elastic.

Answer: FALSE

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 67) If demand is inelastic, the absolute value of the price elasticity coefficient is greater than one.

Answer: FALSE

Diff: 1 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 68) If the demand for a product is elastic, the quantity demanded changes by a smaller percentage than the percentage change in price.

Answer: FALSE

Diff: 2 Page Ref: 173

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 69) If the absolute value of the price elasticity of demand for gasoline is 0.5, then a 10 percent increase in the price of gasoline leads to a 0.5 percent decrease in the quantity demanded.

Answer: FALSE

Diff: 2 Page Ref: 172–173

Topic: Price Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 70) If at a price of \$10, a vendor sells 5 units of a product and at a price of \$8, 6 units are sold, then, using the midpoint formula, the demand for this good is inelastic.

Answer: TRUE

Diff: 2 Page Ref: 174

Topic: The Midpoint Formula

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 71) Briefly explain the economic concept of elasticity.

Answer: Elasticity is a measure of how one economic variable responds to changes in another economic variable.

Diff: 1 Page Ref: 172

Topic: Elasticity

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 72) What does price elasticity of demand measure? When is demand elastic? Inelastic? Unit elastic?

Answer: Price elasticity of demand measures the responsiveness of the quantity of a product demanded to a change in the price of the product. Demand is elastic when the percentage change in quantity demanded is greater than the percentage change in price. Demand is inelastic when the percentage change in quantity demanded is less than the percentage change in price. Demand is unit elastic when the percentage change in quantity demanded is equal to the percentage change in price.

Diff: 2 Page Ref: 172–173

Topic: Price Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 73) When is demand perfectly elastic? When is demand perfectly inelastic? What are the values of the price elasticity of demand when demand is perfectly elastic or perfectly inelastic? What do perfectly elastic and perfectly inelastic demand curves look like?

Answer: Demand is perfectly elastic when quantity demanded is infinitely responsive to price. If demand is perfectly elastic, price elasticity of demand equals infinity, and the demand curve is a horizontal line. Demand is perfectly inelastic when quantity demanded is completely unresponsive to price. If demand is perfectly inelastic, price elasticity of demand equals zero, and the demand curve is a vertical line.

Diff: 2 Page Ref: 176

Topic: Elastic and Inelastic Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 74) Suppose the price of gasoline in July 2004 averaged \$1.35 a gallon and 15 million gallons a day were sold. In October 2004, the price averaged \$2.15 a gallon and 14 million gallons were sold. If the demand for gasoline did not shift between these two months, use the midpoint formula to calculate the price elasticity of demand. Indicate whether demand was elastic or inelastic.

Answer: Price elasticity of demand =  $[(14 - 15) / (15 + 14)/2] / [(2.15 - 1.35) / (1.35 + 2.15)/2] = (-1 / 14.5) / (0.80 / 1.75) = (-0.069 / 0.457) = -0.15$ .

Price elasticity of demand equals 0.15 (in absolute value) indicating that demand was inelastic.

Diff: 2 Page Ref: 174

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 75) The current price of canvas messenger bags is \$36 each and sales of the bags equal 400 per week. If the price elasticity of demand is -2.5 and the price changes to \$44, how many messenger bags will be sold per week? Use the midpoint formula.

Answer: Using the midpoint formula:  $-2.5 = (400 - X) / [(X + 400) / 2] / (36 - 44) / [(36 + 44)/2]$

$$-2.5 \times -0.2 = (400 - X) / [(X + 400) / 2]$$

$$0.5 = (400 - X) / [(X + 400) / 2]$$

$$0.5(200 + 0.5X) = 400 - X$$

$$1.25X = 300$$

$$X = 240 \text{ bags.}$$

Diff: 3 Page Ref: 174

Topic: The Midpoint Formula

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 76) The U.S. government's focus on supply reduction efforts in its "war on drugs" has been relatively unsuccessful at addressing illegal drug use. Some economists believe that a successful anti-drug program must concentrate on reducing demand; for example, through drug education and voluntary treatment programs for addicts.
- Suppose the price elasticity of demand for cocaine is -0.5. What will happen to the equilibrium price, quantity and total revenue from cocaine sales if the government succeeds in its efforts to reduce demand? What is likely to happen to the incentive to sell cocaine?
  - Suppose the government continues to concentrate its efforts on supply reduction and is able to reduce the supply of cocaine. As a result of the reduction in supply the price of cocaine increases by 25 percent. If the price elasticity of demand is -0.5, what is likely to happen to the incentive to sell cocaine?
  - Based on your answers, explain why one approach might be preferred over the other.

- Answer: a. Since the demand is inelastic, a decrease in demand will lead to a decrease in price, quantity and total revenue. Reduced revenue is likely to deter drug trafficking.  
 b. The increase in price increases revenue when demand is inelastic; this will increase the incentive to sell cocaine.  
 c. If people respond to incentives, the government will have more success in reducing cocaine consumption if it uses anti-drug programs that concentrate on reducing demand rather than programs that concentrate on reducing supply.

Diff: 3 Page Ref: 172–173

Topic: Price Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

## 6.2 The Determinants of the Price Elasticity of Demand

- 1) Which of the following products comes closest to having a perfectly inelastic demand?  
 A) gasoline  
 B) cholesterol medication in general  
 C) iPhones  
 D) bus rides

Answer: B

Diff: 1 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 2) Which of the following statements about the price elasticity of demand is *correct*?  
 A) The elasticity of demand for a good in general is equal to the elasticity of demand for a specific brand of the good.  
 B) The absolute value of the elasticity of demand ranges from zero to one.  
 C) Demand is more elastic in the long run than it is in the short run.  
 D) Demand is more elastic the smaller the percentage of the consumer's budget the item takes up.

Answer: C

Diff: 2 Page Ref: 179

Topic: Passage of Time

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 3) When there are few close substitutes available for a good, demand tends to be  
 A) perfectly inelastic.  
 B) perfectly elastic.  
 C) relatively inelastic.  
 D) relatively elastic.

Answer: C

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 4) Jonah lives in a small town where there is only one Mexican restaurant. Which of the following is likely to be true about the price elasticity of demand for meals at the Mexican restaurant?

A) Demand is likely to be perfectly inelastic.  
 B) Demand is likely to be perfectly elastic.  
 C) Demand is likely to be relatively elastic.  
 D) Demand is likely to be relatively inelastic.

Answer: D

Diff: 1 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 5) A demand curve that is horizontal indicates that the commodity

A) has few substitutes. B) must be very cheap.  
 C) is a necessity. D) has a large number of substitutes.

Answer: D

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 6) Which of the following goods would have the most inelastic demand?

A) ski vacations B) bread C) luxury cars D) big screen TVs

Answer: B

Diff: 2 Page Ref: 179

Topic: Luxuries versus Necessities

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 7) The demand for all carbonated beverages is likely to be \_\_\_\_\_ the demand for Dr. Pepper.

A) more elastic than B) perfectly elastic compared to  
 C) less elastic than D) perfectly inelastic compared to

Answer: C

Diff: 2 Page Ref: 180–181

Topic: Definition of the Market

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 8) The demand for gasoline in the short run is

A) elastic because people can easily switch to public transportation.  
 B) perfectly inelastic because people have no choice but to buy gasoline.  
 C) unit-elastic because people tend to consume a stable amount of gasoline per period.  
 D) inelastic because there are no good substitutes for gasoline.

Answer: D

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 9) According to an article in the Wall Street Journal, unlike airlines, even elite hotels don't have sophisticated systems that can react quickly to changes in demand. Even if they could, many hoteliers say people don't respond that much to lower rates. "We've tested this, cutting our rates by \$50 [per night], and we didn't see an appreciable response in occupancy," says Jim Schultenover, a vice president for Ritz–Carlton.

Source: Jesse Drucker, "In Times of Belt–Tightening, We Seek Reasonable Rates," *Wall Street Journal*, April 6, 2001.

Based on the information above, the demand for hotel rooms is

- A) elastic.
- B) unit–elastic.
- C) inelastic.
- D) perfectly elastic.

Answer: C

Diff: 2 Page Ref: 179

Topic: The Determinants of the Price Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 10) According to a study of the price elasticities of products sold in supermarkets, the price elasticity of demand for toothpaste is estimated at  $-0.45$ . Which of the following could explain why the price elasticity of demand for toothpaste is so low?

- A) The toothpaste industry is highly competitive.
- B) Toothpaste is relatively inexpensive.
- C) Toothpaste is heavily endorsed by dentists.
- D) There are few close substitutes for toothpaste.

Answer: D

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 11) If the price of steel increases drastically, the quantity of steel demanded by the building industry will fall significantly over the long run because

- A) buyers of steel are more sensitive to a price change if they have more time to adjust to the price change.
- B) buyers of steel are less sensitive to a price change if they have more time to adjust to the price change.
- C) sales revenue in the building industry will fall sharply.
- D) profits will fall by a greater amount in the long run than in the short run.

Answer: A

Diff: 2 Page Ref: 179

Topic: Passage of Time

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 12) With the increased usage of cell phone services, what has happened to the price elasticity of demand for land-line telephone services?

A) It has become more price inelastic.  
 B) It has become more price elastic.  
 C) It has become more income elastic.  
 D) The absolute value of the price elasticity coefficient has probably gone down.

Answer: B

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 13) Which of the following would result in a higher absolute value of the price elasticity of demand for a product?

A) A wide variety of substitutes are available for the good.  
 B) The time period under consideration is short.  
 C) The good is a necessity.  
 D) The expenditure on the good is small relative to one's budget.

Answer: A

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 14) If the market for a product is broadly defined, then

A) the good has many complements.  
 B) there are few substitutes for the product and the demand for the product is relatively inelastic.  
 C) there are many substitutes for the product and the demand for the product is relatively elastic.  
 D) the expenditure on the good is likely to make up a large share of one's budget.

Answer: B

Diff: 2 Page Ref: 180–181

Topic: Definition of the Market

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 15) Rank these three items in terms of the elasticity of the demand for them at any given price, from most elastic to least elastic: hot beverages, coffee and Peet's Coffee.

A) hot beverages, coffee, Peet's Coffee  
 B) Peet's Coffee, coffee, hot beverages  
 C) coffee, Peet's Coffee, hot beverages  
 D) coffee, hot beverages, Peet's Coffee

Answer: B

Diff: 2 Page Ref: 180–181

Topic: Definition of the Market

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) The larger the share of a good in a consumer's budget, holding everything else constant, the
- A) more price elastic is a consumer's demand.
  - B) more vertical is a consumer's demand curve.
  - C) more price inelastic is a consumer's demand.
  - D) more unit-elastic is a consumer's demand.

Answer: A

Diff: 2 Page Ref: 179

Topic: Share of the Good in the Consumer's Budget

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 17) The most important determinant of the price elasticity of demand for a good is
- A) the definition of the market for a good.
  - B) the availability of substitutes for the good.
  - C) the share of the good in the consumer's budget.
  - D) whether the good is a necessity or a luxury.

Answer: B

Diff: 2 Page Ref: 178

Topic: Availability of Close Substitutes

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 18) Which of the following statements is *true*?
- A) In general, if a product has few substitutes it will have an elastic demand.
  - B) The more time that passes the more inelastic the demand for a product becomes.
  - C) The demand curve for a necessity is more elastic than the demand curve for a luxury.
  - D) The more narrowly we define a market, the more elastic the demand for a product will be.

Answer: D

Diff: 2 Page Ref: 179

Topic: Definition of the Market

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 19) Which of the following is *not* a determinant of a good's price elasticity of demand?
- A) the slope of the demand curve
  - B) the share of the good in the consumer's total budget
  - C) whether the good is a luxury or a necessity
  - D) the passage of time

Answer: A

Diff: 2 Page Ref: 178

Topic: Determinants of the Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 20) If the absolute value of the price elasticity of demand for DVD movies is 0.8 then the elasticity of demand for the DVD for the movie *The Hangover* should be
- A) less than 0.8 in absolute value.
  - B) greater than 0.8 in absolute value.
  - C) equal to 1 in absolute value.
  - D) equal to zero because the DVD of this movie has been out for several years.

Answer: B

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 21) Holding everything else constant, the demand for a good tends to be more elastic
- A) the more substitutes there are for the good.
  - B) the shorter the time period involved.
  - C) the more consumers perceive the good to be a necessity.
  - D) the less important the product is in consumers' budgets.

Answer: A

Diff: 2 Page Ref: 178–179

Topic: Availability of Close Substitutes

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 22) Holding everything else constant, the absolute value of the price elasticity of demand for Saucony tennis shoes is \_\_\_\_\_ the price elasticity of demand for tennis shoes.
- A) less than
  - B) equal to
  - C) twice as great as
  - D) greater than

Answer: D

Diff: 2 Page Ref: 179

Topic: Definition of the Market

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 23) Which of the following could explain why the demand for table salt is inelastic?
- A) Salt is a luxury good.
  - B) Salt is a rare commodity.
  - C) Households devote a very small portion of their income to salt purchases.
  - D) Salt is a luxury for high income consumers but a necessity for low income consumers.

Answer: C

Diff: 1 Page Ref: 179

Topic: Share of the Good in the Consumer's Budget

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 24) Economist Jerry Hausman estimated the price elasticity of demand for breakfast cereal. He found that
- A) the price elasticity for a particular brand of raisin bran was the same as the elasticity of demand for all family cereals.
  - B) the price elasticity of demand for Post Raisin Bran is less than the price elasticity of demand for Kellogg's Raisin Bran.
  - C) the price elasticity of all family breakfast cereals is greater than the price elasticity of demand for Post Raisin Bran or Kellogg's Raisin Bran.
  - D) the price elasticity of demand for a particular brand of raisin bran was larger in absolute value than the elasticity for all family cereals.

Answer: D

Diff: 2 Page Ref: 180–181

Topic: Definition of the Market

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 25) Economist Jerry Hausman estimated the price elasticity of demand for "Post Raisin Bran" and "All types of breakfast cereals." He found that the price elasticity of demand for Post Raisin Bran was -2.5 and the price elasticity of demand for "All types of breakfast cereals" was -0.9. Which of the following can be implied from Hausman's estimates?
- A) The demand for "All types of breakfast cereals" is elastic.
  - B) A 1 percent increase in the price of Post Raisin Bran will lead to a 25 percent decrease in the quantity demanded of Post Raisin Bran.
  - C) The demand for Post Raisin Bran is more elastic than the demand for "All types of breakfast cereals."
  - D) A 1 percent decrease in the price of breakfast cereals will lead to a 2.5 percent increase in the quantity demanded of Post Raisin Bran.

Answer: C

Diff: 2 Page Ref: 180–181

Topic: Definition of the Market

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 26) Most people buy salt infrequently and in small quantities. Even a doubling of the price of salt is likely to result in a small decline in the quantity of salt demanded. Therefore
- A) the demand for salt will be perfectly inelastic.
  - B) salt is a normal good.
  - C) the demand for salt is relatively inelastic.
  - D) the price elasticity of demand for salt is greater than 1 (in absolute value).

Answer: C

Diff: 1 Page Ref: 179

Topic: Share of the Good in the Consumer's Budget

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Table 6-2

	Estimated Price Elasticity of Demand
Coca-Cola	-3.0
All carbonated soft drinks	-1.5
All soft drinks	-0.8

27) *Refer to Table 6-2.* Assume that an economist has estimated the price elasticity of demand values in the table above. Use the data in the table to select the correct statement.

- A) The demand for Coca-Cola is inelastic.
- B) The elasticity for "All soft drinks" is less than the elasticity for Coca-Cola because Coca-Cola is more of a luxury than a necessity; "All soft drinks" represent goods that are more necessity than luxury.
- C) The difference in elasticity values is explained by the fact that the more narrowly we define a market the more elastic the demand will be.
- D) There are fewer substitutes for "All carbonated soft drinks" than there are for "All soft drinks."

Answer: C

Diff: 2 Page Ref: 179

Topic: Definition of the Market

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

28) In general, a "big ticket item" such as a house or new car will

- A) tend to have a more elastic demand than a lower priced good.
- B) tend to have an inelastic demand because spending on the item takes up a large share of the average consumer's budget.
- C) tend to have an inelastic demand because it has many substitutes.
- D) tend to have a more inelastic demand the more time that passes.

Answer: A

Diff: 2 Page Ref: 179

Topic: Share of the Good in the Consumer's Budget

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

29) Jill Borts believes that the price elasticity of demand for her economics textbook is relatively inelastic. She argues "I was told I had to purchase a book written by Hubbard and O'Brien that is required by my instructor. If I wanted to buy a mystery novel I would have many authors to choose from. Therefore, the demand for mystery novels is more elastic than the demand for my textbook." Is Jill correct?

- A) The demand for the textbook is more inelastic, but Jill's reasoning is incorrect. The reason the textbook has an inelastic demand is that it is more expensive than any novel.
- B) She is correct.
- C) She is confused. She should have concluded that the textbook has a more elastic demand than a novel.
- D) She is correct that the textbook has a more inelastic demand, but that is because most students pay for their textbooks with credit or debit cards. Most people pay for novels and other books with cash or by check.

Answer: B

*Diff: 2 Page Ref: 178–179*

*Topic: Availability of Close Substitutes*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

30) Necessities tend to have more inelastic demands than luxuries.

**Answer: TRUE**

*Diff: 1 Page Ref: 179*

*Topic: Luxuries versus Necessities*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

31) When there are few substitutes available for a good, demand tends to be relatively inelastic.

**Answer: TRUE**

*Diff: 1 Page Ref: 178–179*

*Topic: Availability of Close Substitutes*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

32) If the market for a product is narrowly defined, then there are likely to be many substitutes for the product and the demand for the product is relatively elastic.

**Answer: TRUE**

*Diff: 2 Page Ref: 179*

*Topic: Definition of the Market*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

33) The demand for *The Federalist Papers* is likely to be more elastic than the demand for a best-selling mystery novel.

**Answer: FALSE**

*Diff: 2 Page Ref: 178–179*

*Topic: Availability of Close Substitutes*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

34) The demand for heating oil in the short run is more elastic than the long run demand for heating oil.

**Answer: FALSE**

*Diff: 1 Page Ref: 179*

*Topic: Passage of Time*

*Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

*AACSB: Analytic thinking*

- 35) The price elasticity of demand for Kellogg's Raisin Bran is larger in absolute value than the price elasticity for all breakfast cereals.

Answer: TRUE

Diff: 1 Page Ref: 179

Topic: Definition of the Market

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 36) List the five key determinants of price elasticity of demand and explain how each determinant indicates if demand tends to be elastic or inelastic.

Answer: 1. Availability of close substitutes: If a product has more substitutes available, it will have more elastic demand. If a product has fewer substitutes available, it will have less elastic demand.

2. Passage of time: The more time that passes, the more elastic the demand for a product becomes.

3. Luxuries versus necessities: The demand curve for a luxury is more elastic than the demand curve for a necessity.

4. Definition of the market: The more narrowly a market is defined, the more elastic demand will be.

5. Share of a good in a consumer's budget: The demand for a good will tend to be more elastic the larger the share of the good in the average consumer's budget.

Diff: 2 Page Ref: 178–179

Topic: The Determinants of the Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 37) For each pair of items below determine which product would have the higher price elasticity of demand (in absolute value).

a. Insulin for a diabetic or aspirin for someone suffering a headache.

b. A new Whirlpool 27 cu.ft. side-by-side refrigerator or electricity to power your all-electric home.

c. A can of Red Bull or soft drinks in general.

Answer: a. The demand for aspirin is more price elastic (its elasticity has a higher absolute value) than the demand for insulin. Insulin is more necessity than luxury and has virtually no substitutes. There are substitutes for aspirin and it is not necessarily a necessity.

b. The demand for a new refrigerator is more price elastic than the demand for electricity to power your home. The Whirlpool refrigerator has many substitutes.

Electricity to power your all-electric home is more necessity than luxury, and if your home is powered only by electricity, few, if any, substitutes are available.

c. The demand for Red Bull is more price elastic than demand for soft drinks in general. Narrowly defined markets (such as the Red Bull drink market) have many substitutes.

Diff: 2 Page Ref: 178–179

Topic: Determinants of the Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 38) For each pair of items below determine which product would have the higher price elasticity of demand (in absolute value).
- a. Blood pressure medicine for someone who has high blood pressure and the purchase of Clairol hair coloring product.
  - b. A new Ford Fusion or a tank of gas for your current car.
  - c. A Seiko watch or watches in general.

Answer: a. The demand for the hair product is more price elastic (its elasticity has a higher absolute value) than the demand for blood pressure medicine. The latter is more necessity than luxury and has virtually no substitutes. There are substitutes for the Clairol hair coloring product and it is not a necessity.

b. The demand for a new car is more price elastic than the demand for a tank of gas for your current car. The Ford Fusion: (a) has many substitutes, including your current car and (b) will consume a relatively large portion of your budget. Gasoline for the car you own is more necessity than luxury.

c. The demand for Seiko watches is more price elastic than demand for watches in general. Narrowly defined markets (such as the Seiko watch market) have many substitutes.

Diff: 2      Page Ref: 178  
 Topic: Determinants of the Price Elasticity of Demand  
 Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.  
 AACSB: Analytic thinking

- 39) The estimated price elasticities of demand for the products listed in the table as "Product A" are from Table 6-2 in the text. Indicate whether the products listed as "Product B" will have a more elastic or less elastic demand than the corresponding Product A.

Product A	Estimated Elasticity for Product A	Product B	Is Estimated Elasticity for Product B More Elastic or Less Elastic than for Product A?
Beer	-0.29	Samuel Adams Boston Lager	
Chicken	-0.37	Organically raised chicken	
Cocaine	-0.28	Illegal narcotics	
Cigarettes	-0.25	Marlboro Lights	
Restaurant meals	-0.67	Denny's Grand Slam breakfast	



Answer:

Product A	Estimated Elasticity for Product A	Product B	Is Estimated Elasticity for Product B More Elastic or Less Elastic than for Product A?
Beer	-0.29	Samuel Adams Boston Lager	More elastic
Chicken	-0.37	Organically raised chicken	More elastic
Cocaine	-0.28	Illegal narcotics	Less elastic
Cigarettes	-0.25	Marlboro Lights	More elastic
Restaurant meals	-0.67	Denny's Grand Slam breakfast	More elastic

Diff: 2 Page Ref: 178

Topic: Determinants of the Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

### 6.3 The Relationship between Price Elasticity of Demand and Total Revenue

1) Total revenue equals

- A) price per unit times quantity sold.
- B) price per unit times quantity supplied.
- C) price per unit times change in quantity sold.
- D) change in price per unit times quantity sold.

Answer: A

Diff: 1 Page Ref: 181

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

2) When demand is elastic, a fall in price causes total revenue to rise because

- A) when price falls, quantity sold increases so total revenue automatically rises.
- B) the increase in quantity sold is large enough to offset the lower price.
- C) the percentage increase in quantity demanded is less than the percentage fall in price.
- D) the demand curve shifts.

Answer: B

Diff: 2 Page Ref: 182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

3) When demand is unit-elastic, a change in price causes total revenue to stay the same because

- A) the percentage change in quantity demanded exactly offsets the percentage change in price.
- B) buyers are buying the same quantity.
- C) total revenue never changes with price changes.
- D) the change in profit is offset by the change in production cost.

Answer: A

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 4) If a firm lowered the price of the product it sells and found that total revenue did not change, then the demand for its product is
- A) perfectly inelastic.
  - B) perfectly elastic.
  - C) unit–elastic.
  - D) relatively elastic.

Answer: C

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 5) If a firm wanted to know whether the demand for its product was elastic, unit–elastic, or inelastic, then the firm could
- A) survey competitors and ask them what they think demand elasticity is for the product.
  - B) talk to its customers.
  - C) change price a little bit and observe what happens to total revenue.
  - D) not do anything as there is no way to find an elasticity value.

Answer: C

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 6) A service station owner in Staten Island, New York, was worried that raising the price of gasoline would cause the quantity demanded to fall by so much that he would be in a worse situation than if he did not raise the price. If raising the price of gasoline would cause the owner to receive less total revenue from the sale of gasoline, the demand for gasoline is
- A) elastic.
  - B) inelastic.
  - C) unit elastic.
  - D) perfectly inelastic.

Answer: A

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Table 6-3

Price per Pound (dollars)	Quantity of Cheese Demanded (pounds)
\$16	3
14	4
12	5
10	6
8	7
6	8
4	9
2	10

7) **Refer to Table 6-3.** Over what range of prices is the demand elastic?

- A) over the entire range of prices                      B) between \$14 and \$16  
C) between \$8 and \$16                                      D) between \$2 and \$8

Answer: B

Diff: 2      Page Ref: 183-184

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

8) **Refer to Table 6-3.** Over what range of prices is the demand inelastic?

- A) over the entire range of prices                      B) between \$12 and \$16  
C) between \$8 and \$16                                      D) between \$2 and \$8

Answer: D

Diff: 2      Page Ref: 183-184

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

9) Consider a demand curve that has a constant elasticity value of 0. What happens to quantity demanded and total revenue when price increases?

- A) The quantity demanded and total revenue remain the same.  
B) The quantity demanded does not change but total revenue increases.  
C) The quantity demanded and total revenue fall to zero.  
D) The quantity demanded does not change but total revenue decreases.

Answer: B

Diff: 2      Page Ref: 182-183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 10) If the price elasticity of demand for canned soup is estimated at  $-1.62$ . What happens to sales revenue if the price of canned soup rises?

A) It falls by 162 percent.  
 B) It rises by 1.62 percent.  
 C) It falls.  
 D) It rises.

Answer: C

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 11) Suppose a decrease in the supply of bottled water results in a decrease in revenue. This indicates that

A) the demand for bottled water is inelastic in the price range considered.  
 B) the demand for bottled water is elastic in the price range considered.  
 C) the supply of bottled water is inelastic in the price range considered.  
 D) the supply of bottled water is elastic in the price range considered.

Answer: B

Diff: 3 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 12) Suppose a decrease in the supply of wheat results in an increase in revenue. This indicates that

A) the decrease in quantity sold is proportionately larger than the resulting change in price.  
 B) the resulting increase in price is proportionately greater than decrease in quantity sold.  
 C) the demand curve for wheat must be vertical.  
 D) the supply curve for wheat must be vertical.

Answer: B

Diff: 3 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 13) Suppose the demand for milk is relatively inelastic. What happens to sales revenue if the government imposes a price floor above the free market equilibrium price in the market for milk?

A) Sales revenue falls.  
 B) Sales revenue rises.  
 C) Sales revenue remains unchanged.  
 D) It cannot be determined without information on prices.

Answer: B

Diff: 3 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 14) Suppose the absolute value of the price elasticity of demand for meals at Fortune Buffet House is  $\infty$ . What happens to sales revenue if the restaurant increases its price by 5 percent?
- A) Sales revenue falls by less than 5 percent.
  - B) Sales revenue remains unchanged.
  - C) Sales revenue falls by 100 percent.
  - D) It cannot be determined without information on prices.

Answer: C

Diff: 3 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

**Table 6–4**

The publisher of a magazine gives his staff the following information:

Current price	\$2.00 per issue
Current sales	150,000 copies per month
Current revenue	\$300,000 per month
Current total costs	\$450,000 per month

He tells the staff, "Our costs are currently \$150,000 more than our revenues each month. I propose to eliminate this problem by raising the price of the magazine to \$3.00 per issue. This will result in our revenue being exactly equal to our cost."

- 15) Refer to Table 6–4. Which of the following statements is correct?
- A) The publisher's analysis is correct only if the demand is perfectly elastic.
  - B) The publisher's analysis is correct only if the demand is elastic.
  - C) The publisher's analysis is correct only if the demand is perfectly inelastic.
  - D) The publisher's analysis is correct only if the demand is unit–elastic.

Answer: C

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) An article in the Wall Street Journal noted the following: Instead of relying on a full–coach, round–trip unrestricted fare of about \$2,000 between Cleveland and Los Angeles ...Continental [Airlines] since June has offered a \$716 unrestricted fare in that market .... Through October, the test resulted in about the same revenue that Continental thinks it would have collected with its higher fare.

Source: Scott McCartney, "Airlines Try Cutting Business Fares, Find They Don't Lose Revenue," Wall Street Journal, November 22, 2002.

What is the absolute value of the price elasticity of demand on this airline route?

- A) 0
- B) less than 1
- C) greater than 1
- D) approximately 1

Answer: D

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

17) Total revenue is equal to

- A) the amount of funds earned by a firm minus its costs of production.
- B) the total quantity sold of a product over a given period of time.
- C) the price of a product multiplied by the number of units of the product sold.
- D) the monetary value of the capital (for example, plant and equipment) a firm owns.

Answer: C

Diff: 1 Page Ref: 181

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

18) Which of the following statements is true?

- A) Whenever a firm raises its price its total revenue will increase.
- B) When a firm lowers its price its total revenue may either increase or decrease.
- C) Whenever a firm increases its quantity sold its revenue will increase.
- D) Total revenue will equal zero when the demand for a product is unit-elastic.

Answer: B

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

19) If demand is perfectly inelastic, the absolute value of the price elasticity coefficient is

- A) infinity.
- B) zero.
- C) more than one.
- D) equal to the absolute value of the slope of the demand curve.

Answer: B

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 20) If a firm raised its price and discovered that its total revenue fell, then the demand for its product is
- A) perfectly inelastic.
  - B) relatively inelastic.
  - C) perfectly elastic.
  - D) relatively elastic.

Answer: D

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Table 6–5

Hourly Rental Rate (dollars)	Quantity Demanded (hours)
\$60	40
75	32
80	30
100	24

- 21) *Refer to Table 6–5.* Katie Graham owns a kayak rental service in Santa Barbara. Table 6.3 below shows her estimated demand schedule for kayak rentals per week. She would like to increase her sales revenue by changing the price she charges for rentals. At present she charges \$75. Based on the information in the table, Katie
- A) is not able to increase her revenue by changing her price because the demand for kayak rentals is unit-elastic.
  - B) should lower her price to \$60 to increase her revenue because the demand for kayak rentals is price elastic.
  - C) should raise her price to \$80 to increase her revenue because the demand for kayak rentals is price inelastic.
  - D) should raise her price to earn the most revenue.

Answer: A

Diff: 3 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 22) Which of the following explains why a firm would be interested in the knowing the price elasticity of demand for a good it sells?
- A) The price elasticity of demand can be used to determine the impact of changes in income on quantity sold.
  - B) Knowing the price elasticity of demand allows the firm to determine how the cost of producing additional units of the good will change.
  - C) Knowing the price elasticity of demand allows the firm to calculate how changes in the price of the good will affect the firm's total profit.
  - D) The price elasticity of demand allows the firm to calculate how changes in the price of the good will affect the firm's total revenue.

Answer: D

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

23) Opera Estate Girls' School is considering increasing its tuition to raise revenue. If the school believes that raising tuition will increase revenue

- A) it is assuming that the demand for attending the school is inelastic.
- B) it is assuming that the demand for attending the school is elastic.
- C) it is assuming that the demand for attending the school is unit-elastic.
- D) it is assuming that the demand for attending the school is perfectly elastic.

Answer: A

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

24) Along a downward sloping, linear demand curve, total revenue is the greatest

- A) where demand is normal.
- B) where demand is the most inelastic.
- C) where demand is the most elastic.
- D) where demand is unit-elastic.

Answer: D

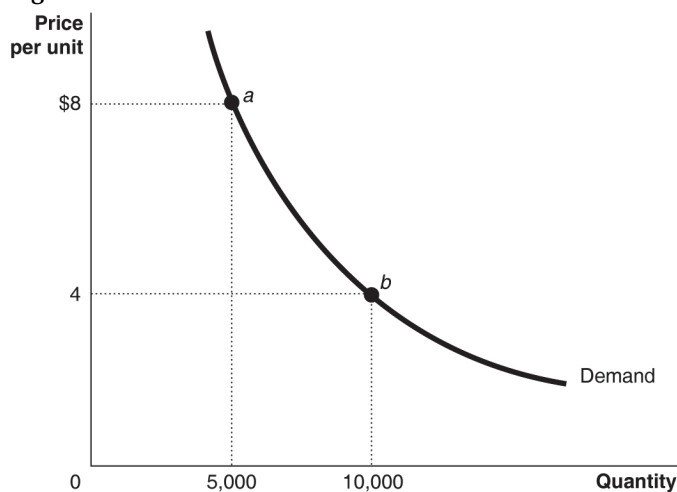
Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-7



25) Refer to Figure 6-7. Between points *a* and *b* on the demand curve, demand is

- A) perfectly inelastic.
- B) unit-elastic.
- C) perfectly elastic.
- D) elastic.

Answer: B



Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 26) In September 2012, the average price of gasoline in the United States was \$3.91 per gallon, and consumers purchased nearly 5 percent less gasoline than they had during September 2011, when the average price of gasoline was \$3.66 per gallon. Based on these figures, when the price of gasoline rose from \$3.66 per gallon to \$3.91 per gallon, total revenue
- A) increased.
  - B) decreased.
  - C) did not change.
  - D) There is not enough information to determine what happened to total revenue.

Answer: A

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 27) Assume that the market for barley is in equilibrium and the demand for barley is inelastic. Predict what happens to the revenue of barley farmers if a prolonged drought reduces the supply of barley. The drought will cause farm revenue to
- A) rise because there will be a shortage of barley.
  - B) rise because the percentage decrease in quantity sold is less than the percentage increase in price.
  - C) rise because the percentage increase in quantity sold is greater than the percentage increase in price.
  - D) fall because of the decrease in the quantity of barley sold.

Answer: B

Diff: 3 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 28) Assume that you own a small boutique hotel. In an attempt to raise revenue you reduce your rates by 20 percent. However, your revenue falls. What does this indicate about the demand for your boutique hotel rooms?
- A) Boutique hotel rooms are inferior goods.
  - B) Demand is inelastic.
  - C) The demand curve for your hotel rooms is vertical.
  - D) Demand is elastic.

Answer: B

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 29) Suppose when Nabloom's Bakery raised the price of its breads by 10 percent, the quantity demanded fell by 15 percent. What was the effect on sales revenue?

A) Sales revenue increased.  
 B) Sales revenue remained unchanged.  
 C) Sales revenue decreased.  
 D) It cannot be determined without information on prices.

Answer: C

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 30) Suppose at the current price, the demand for copper is estimated at –3.14. What happens to sales revenue if the government imposes a price ceiling below the free market equilibrium price in the copper market?

A) Sales revenue falls.  
 B) Sales revenue rises.  
 C) Sales revenue remains unchanged because copper is a necessity for most industries.  
 D) It cannot be determined without information on prices.

Answer: B

Diff: 3 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 31) Suppose a decrease in the supply of paper results in an increase in revenue. This indicates that

A) the demand for paper is inelastic.                      B) the demand for paper is elastic.  
 C) the supply of paper is inelastic.                      D) the supply of paper is elastic.

Answer: A

Diff: 3 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 32) Which of the following statements is true?

A) If the price of a good is lowered and total revenue decreases, demand is elastic.  
 B) If the price of a good is raised and total revenue does not change, demand is perfectly elastic.  
 C) If the price of a good is raised and total revenue increases, demand is inelastic.  
 D) If the price of a good is lowered and total revenue increases, demand is inelastic.

Answer: C

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

33) Which of the following correctly comments on the following statement? "The only way to increase the revenue from selling a product is to increase the product's price."

- A) It is not true. Revenue will increase as the price of the product increases only if demand is elastic.
- B) This statement is not true. Revenue will increase as the price of the product increases only if demand is inelastic.
- C) The statement is true.
- D) This statement is not true. Revenue will decrease as the price of the product increases because quantity demanded will fall.

Answer: B

Diff: 3 Page Ref: 183–184

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

34) If tolls on a toll road can be raised significantly before commuters will consider using a free alternative, demand for using the toll road must be

- A) inelastic.
- B) elastic.
- C) unit elastic.
- D) perfectly elastic.

Answer: A

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

35) If tolls on a toll road can be raised significantly before commuters will consider using a free alternative, then an increase in tolls will result in

- A) a decrease in total revenue.
- B) a decrease in non-toll road usage.
- C) an increase in total revenue.
- D) an increase in toll road usage.

Answer: C

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

### Article Summary

Based on resale prices for tickets for the 2013 Super Bowl in New Orleans, face-value prices for the most expensive tickets to the 2014 game are expected to more than double, with significant price increases for lesser-valued tickets as well. Evidence indicates that sports teams are more interested in maximizing attendance instead of ticket revenue, since greater attendance means more spending on items such as parking and concessions. Higher ticket prices in secondary markets seem to verify that teams are charging less than they could be if their goal was to maximize ticket revenue.

Source: Patrick Rishe, "Super Bowl XLVIII Pricing: A Lesson In Demand Elasticity," *Forbes*, September 19, 2013.

36) *Refer to the Article Summary.* The idea that sports teams could charge more for tickets and still increase revenue indicates that tickets are being priced in the \_\_\_\_\_ portion of their demand curve.

- A) elastic
- C) unit elastic

- B) inelastic
- D) perfectly elastic

Answer: B

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 37) **Refer to the Article Summary.** How would sports teams know if they were operating on the elastic portion of the demand curve for tickets?

- A) If they increased ticket prices and the total revenue from ticket sales increased.
- B) If they increased ticket prices and the total revenue from ticket sales did not change.
- C) If they increased ticket prices and the total revenue from ticket sales decreased.
- D) If they decreased ticket prices and the total revenue from ticket sales did not change.

Answer: C

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 38) If a firm's goal is to maximize revenue, it will price its product to correspond to the unit–elastic segment of its demand curve.

Answer: TRUE

Diff: 1 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 39) When Audrina raised the price of her home made cookies, her total revenue increased. This suggests that the demand for Audrina's cookies is elastic.

Answer: FALSE

Diff: 1 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 40) If the price elasticity of demand is unit–elastic, a 10 percent increase in price will result in a 10 percent increase in revenue.

Answer: FALSE

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 41) If demand for a product is perfectly inelastic a change in price will not change total revenue.

Answer: FALSE

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 42) Suppose the absolute value of the price elasticity of demand for basketball game tickets on your campus is greater than 1. Increasing ticket prices will increase the total revenue from ticket sales.

Answer: FALSE

Diff: 1 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 43) Explain the relationship between price elasticity of demand and total revenue.

Answer: If demand is elastic, the an increase in price reduces total revenue, and a decrease in price increases total revenue.

If demand is inelastic, an increase in price increases total revenue and a decrease in price decreases total revenue.

If demand is unit elastic, a change in price (either up or down) does not affect total revenue.

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 44) You are the manager of a theater. At present the theater charges the same admission price of \$8 to all customers, regardless of age. You propose a two–tier pricing scheme: \$5 for children under the age of 12 and \$10 for adults. You tell your supervisor that your proposal is likely to increase revenues. What must be true about the price elasticity of demand if your proposal is to achieve its goal of raising revenue? Explain your answer.

Answer: You believe that the price elasticity of demand for theatre tickets for children is elastic.

Hence, a decrease in price will increase revenue. The demand for tickets for adults is inelastic; therefore, increasing price for this group will increase revenue.

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 45) Suppose that at a price of \$55, 100 units were sold while at a price of \$33, 153 units were sold. Without calculating the price elasticity value, can you determine whether demand is elastic, unit-elastic, or inelastic? Explain your answer.

Answer: The first total revenue is  $(\$55) \times (100) = \$5,500$  while the second total revenue is  $(\$33) \times (153) = \$5,049$ . Because total revenue decreased when price fell, demand must be inelastic.

Diff: 3 Page Ref: 183–184

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 46) The Mass Rapid Transit (MRT) System in Hong Kong has been running significant losses. Transport Ministry officials have argued over whether to raise fares to combat the losses. One argument against a fare increase is that it will aggravate traffic congestion on the streets during peak commuter hours. Suppose that the current fare is \$4 and the government is considering raising it to \$6. Officials estimate that this reduces the number of rides purchased from 10,000 to 8,000 per day.

- What is the estimated elasticity of demand for MRT rides?
- What does this elasticity of demand suggest to you about what will happen to total revenue earned by the transit system?
- Last year, the MRT system incurred a loss of \$50,000 per day. Do you think the fare increase will resolve the deficit problem as well as Ministry officials anticipate? Explain.

Answer: a. Price elasticity =  $-0.56$ .

b. Total Revenue will increase.

c. The expected increase in revenue is \$8,000 per day. It is unlikely that the fare increase alone will resolve the problem.

Diff: 2 Page Ref: 182–183

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 47) Ali's Gyros operates near a college campus. Ali has been selling 120 gyros a day at \$4.50 each and is considering a price cut. He estimates that he would be able to sell 200 gyros per day at \$3.50 each.

- Calculate the price elasticity of demand using the midpoint formula.
- Calculate the change in revenue as a result of the price cut.

Answer: a. Price elasticity of demand =  $(120 - 200) / [(200 + 120) / 2] / (4.50 - 3.50) / (3.50 + 4.50) / 2] = (-80 / 160) / (1 / 4) = -2$

b. Change in revenue =  $\$700 - \$540 = \$160$

Diff: 2 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 48) Suppose the governor of California has proposed increasing toll rates on California's toll roads, and has presented two possible scenarios to implement these increases. Following are projected data for the two scenarios for the California toll roads:

Scenario 1: Toll rate in 2012: \$10.00. Toll rate in 2016: \$22.50

For every 100 cars using the toll roads in 2012, only 81.6 cars will use the toll roads in 2016.

Scenario 2: Toll rate in 2012: \$10.00. Toll rate in 2016: \$17.50

For every 100 cars using the toll roads in 2012, only 96.2 cars will use the toll roads in 2016.

- Using the midpoint formula, calculate the price elasticity of demand for Scenario 1 and Scenario 2.
- Assume 10,000 cars use California toll roads every day in 2012. What would be the daily total revenue received for each scenario in 2012 and in 2016?
- Is demand under Scenario 1 and under Scenario 2 price elastic, inelastic, or unit elastic. Briefly explain.

(For above questions, assume that nothing other than the toll change occurs during the time frame listed that would affect consumer demand.)

Answer: a.

For Scenario 1:

Percentage change in quantity demanded =  $[(81.6 - 100) / 90.8] \times 100 = -20.3\%$

Percentage change in price =  $[(\$22.50 - \$10.00) / \$16.25] \times 100 = 76.9\%$

Price elasticity of demand =  $-20.3\% / 76.9\% = -0.26$ .

For Scenario 2:

Percentage change in quantity demanded =  $[(96.2 - 100) / 98.1] \times 100 = -3.9\%$

Percentage change in price =  $[(\$17.50 - \$10.00) / \$13.75] \times 100 = 54.5\%$

Price elasticity of demand =  $-3.9\% / 54.5\% = -0.07$ .

- The daily total revenue in 2012 under both scenarios is  $(10,000 \text{ cars} \times \$10.00) = \$100,000$ .

The daily total revenue in 2016 under Scenario 1 is  $(8,160 \text{ cars} \times \$22.50) = \$183,600$ .

The daily total revenue in 2016 under Scenario 2 is  $(9,620 \text{ cars} \times \$17.50) = \$168,320$ .

- For both scenarios, total revenue increases when the toll increases, because the demand under both scenarios is price inelastic.

Diff: 3 Page Ref: 181–182

Topic: Price Elasticity of Demand and Total Revenue

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

## 6.4 Other Demand Elasticities

### 1) Income elasticity measures

- A) how a good's quantity demanded responds to change in the goods price.
- B) how a good's quantity demanded responds to change in the price of another good.
- C) how a good's quantity demanded responds to change in buyers' incomes.
- D) how a good's quantity demanded responds to producers' incomes.

Answer: C

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

### 2) Calculate the income elasticity if an 8 percent increase in income leads to a 4 percent increase in quantity demanded for organic produce.

- A) -0.66
- B) 0.5
- C) 1.5
- D) 2

Answer: B

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

### 3) Studies show that the income elasticity of demand for wine is approximately five. What does this mean?

- A) A 1 percent decrease in the price of wine leads to a 5 percent increase in wine consumption.
- B) A 1 percent increase in income leads to a 5 percent increase in wine consumption.
- C) A 5 percent increase in income leads to a 1 percent increase in wine consumption.
- D) Wine is a relatively elastic good.

Answer: B

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

### 4) Which of the following items is likely to have the highest income elasticity of demand?

- A) a bus ride
- B) a meal at Taco Bell
- C) a vacation home in the Swiss Alps
- D) a tank of gasoline

Answer: C

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 5) If you expect the economy is going to boom and average income in the economy will rise in the foreseeable future, the type of firm that would be able to increase its sales if your expectations are met is

A) one that sells an inferior good.

B) one that sells a necessity good.

C) one that sells a luxury good.

D) one that sells a price inelastic good.

Answer: C

Diff: 2      Page Ref: 186

*Topic: Income Elasticity of Demand*

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

AACSB: Analytic thinking

- 6) Last year, Sefton purchased 60 pounds of potatoes to feed his family of five when his household income was \$30,000. This year, his household income fell to \$20,000 and Sefton purchased 80 pounds of potatoes. All else constant, Sefton's income elasticity of demand for potatoes is

A) negative, so Sefton considers potatoes to be an inferior good.

B) positive, so Sefton considers potatoes to be an inferior good.

C) positive, so Sefton considers potatoes to be a normal good and a necessity.

D) negative, so Sefton considers potatoes to be a normal good.

Answer: A

Diff: 2      Page Ref: 186

Topic: Income Elasticity of Demand

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

AACSB: Analytic thinking

- 7) According to a study of the U.S. demand for alcoholic beverages, the price elasticity of demand for beer is  $-0.30$ . Which of the following could explain why the price elasticity of demand for beer is low?

A) Beer is an inferior alcoholic beverage.

B) More and more people are switching to wine and cocktails rather than beer.

C) The price of beer is relatively low and for many people it is a habit forming product.

D) There are only a few major suppliers of beer.

Answer: C

Diff: 2      Page Ref: 186-187

Topic: The Determinants of the Price Elasticity of Demand

*Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.*

AACSB: Analytic thinking

- 8) Economists estimated that the price elasticity of beer is  $-0.30$  and the income elasticity of beer is  $0.09$ . This means that

A) an increase in the price of beer will increase the quantity demanded of beer and beer is a normal good.

B) an increase in the price of beer will lead to an increase in revenue for beer sellers and beer is a normal good.

C) a decrease in the price of beer will lead to an increase in revenue for beer sellers and beer is an inferior good.

D) an increase in the price of beer will lead to a decrease in the quantity demanded of beer and beer is a necessity.

Answer: B

Diff: 3 Page Ref: 186–187

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 9) Using cross-sectional data from the two Housing Assistance Supply Experiment (HASE) sites—Brown County, Wisconsin, and St. Joseph County, Indiana, John Mulford of Rand Research estimates that the long-run "permanent" income elasticity of housing expenditures to be 0.45 for owners. Using this information, what is likely to happen to housing expenditures if the government increases income transfers to recipients in HASE sites?
- A) Housing expenditures will increase significantly.
  - B) Housing expenditures in HASE sites significantly will fall as recipients moved out of these areas to higher-income areas.
  - C) Housing expenditures will increase, but not significantly.
  - D) Housing expenditures will decrease by a small amount.

Answer: C

Diff: 3 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 10) Linesha, a college student working part-time receives a wage increase. An avid movie buff, she increased her purchases of Blu-ray discs and reduced her purchases of DVDs. Based on this information
- A) DVDs and Blu-ray discs are substitutes.
  - B) Blu-ray discs are normal goods and DVDs are inferior goods.
  - C) DVDs and Blu-ray discs are normal goods.
  - D) the cross-price elasticity between DVDs and Blu-ray discs is negative.

Answer: B

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 11) Cross-price elasticity of demand is calculated as the
- A) percentage change in quantity demanded divided by percentage change in price of a good.
  - B) percentage change in quantity demanded of one good divided by percentage change in price of a different good.
  - C) percentage change in quantity sold divided by percentage change in buyers' incomes.
  - D) percentage change in quantity supplied divided by percentage change in price of a good.

Answer: B

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 12) If the cross-price elasticity of demand for computers and software is negative, this means the two goods are

A) substitutes.                      B) complements.                      C) inferior.                      D) normal.

Answer: B

Diff: 2      Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 13) Suppose Tinsel Town Videos lowers the price of its movie club membership by 10 percent and as a result, CineArts Videos experienced a 16 percent decline in its movie club membership. What is the value of the cross-price elasticity between the two movie club memberships?

A) -1.6                      B) -0.625                      C) 0.625                      D) 1.6

Answer: D

Diff: 2      Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 14) Consider the following pairs of items:

- a. shampoo and conditioner
- b. iPhones and earbuds
- c. a laptop computer and a desktop computer
- d. beef and pork
- e. air-travel and weed killer

Which of the pairs listed will have a negative cross-price elasticity?

A) a and b only                      B) c and d only  
C) e only                      D) a, b, and c only

Answer: A

Diff: 1      Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 15) Consider the following pairs of items:

- a. shampoo and conditioner
- b. iPhones and earbuds
- c. a laptop computer and a desktop computer
- d. beef and pork
- e. air-travel and weed killer

Which of the pairs listed will have cross-price elasticity of zero?

A) a and b only  
B) c only since most people cannot do without computers  
C) e only  
D) none of the pairs listed

Answer: C

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) Suppose the cross-price elasticity of demand between grapefruit juice and orange juice is approximately 6. What does this mean?
- A) A 1 percent decrease in the price of grapefruit juice leads to a 6 percent increase in orange juice consumption.
  - B) A 6 percent increase in the price of grapefruit juice leads to a 1 percent increase in orange juice consumption.
  - C) If the price of grapefruit juice rises by \$1, 6 more cartons of orange juice will be purchased.
  - D) The demand for orange juice is 6 times more than the demand for grapefruit juice.

Answer: A

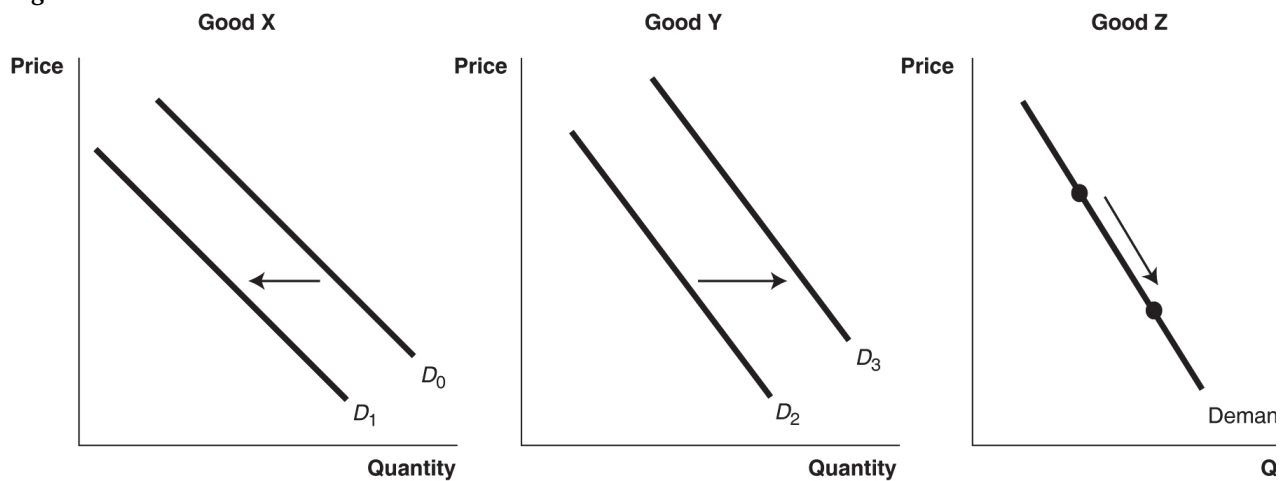
Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-8



- 17) Refer to Figure 6-8. Identify the two goods which are substitutes.
- A) Good X and Good Y
  - B) Good Y and Good Z
  - C) Good X and Good Z
  - D) It is not possible to distinguish any relationship among the goods.

Answer: C

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

18) Refer to Figure 6-8. Identify the two goods which are complements.

- A) Good X and Good Y
- B) Good Y and Good Z
- C) Good X and Good Z
- D) It is not possible to distinguish any relationship among the goods.

Answer: B

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

19) In September 2006, the Food and Drug Administration recommended that Americans avoid eating bagged raw spinach in the wake of an outbreak of E. coli bacteria. Following this recommendation, the food industry looked at alternatives and many turned to arugula. One Chicago distributor claimed, "The sale of the stuff has gone through the roof." Based on this information

- A) arugula is a normal good while raw spinach is an inferior good.
- B) the cross-price elasticity between arugula and spinach is negative.
- C) the cross-price elasticity between arugula and spinach is positive
- D) the price elasticity of arugula is positive while the price elasticity of spinach falls to zero.

Answer: C

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

20) For people who live near a bus route, a subway station, or a commuter rail line, public transportation provides a substitute to driving their own cars. So, for these people, the cross-price elasticity of demand between gasoline and public transportation is

- A) positive.
- B) negative.
- C) zero.
- D) infinity.

Answer: A

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

21) If a firm is in an antitrust court case being accused of monopolizing a product, the firm would hire an economist to show

- A) the cross-price elasticity of demand between the firm's good and another is negative.
- B) the cross-price elasticity of demand between the firm's good and another is positive.
- C) the price elasticity of demand for the firm's good is highly inelastic.
- D) the income elasticity of the firm's good is inferior.

Answer: B

Diff: 3 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 22) Suppose the California Nurses Union successfully secured a 12 percent increase in the wages of registered nurses. If a hospital responds by reducing the quantity of registered nurses hired and increasing the quantity of physician's assistants hired, what conclusion can you draw?
- A) Physician's assistants are more valuable in terms of their productivity.
  - B) The price elasticity of demand for registered nurses is negative while the price elasticity of demand for physician's assistants is positive.
  - C) The cross-price elasticity of demand between registered nurses and physician's assistants is positive.
  - D) The cross-price elasticity of demand between registered nurses and physician's assistants is negative.

Answer: C

Diff: 3 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 23) If the cross-price elasticity of demand between Breeze Detergent and Faber Detergent is a relatively large positive number, then it indicates that
- A) the two brands are probably made by the same company.
  - B) the two brands of detergent are close substitutes.
  - C) consumers have a distinct preference for one brand versus the other.
  - D) detergents are necessities.

Answer: B

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 24) The cross-price elasticity of demand between an unlimited texting option and an unlimited call minutes option offered from a cell phone provider would be
- A) positive if subscribers consider the services substitutes for each other.
  - B) positive if subscribers consider the services complements to each other.
  - C) negative if subscribers consider the services substitutes for each other.
  - D) negative no matter if subscribers consider the services substitutes or complements for each other.

Answer: A

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 25) The income elasticity of demand measures
- A) the responsiveness of quantity demanded to changes in income.
  - B) how a consumer's purchasing power is affected by a change in the price of a product.
  - C) the percentage change in the price of a product divided by the percentage change in consumer income.
  - D) the income effect of a change in price.

Answer: A

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 26) If a good has a negative income elasticity of demand, this indicates that the good is
- A) a substitute with another good.
  - B) a complement with another good.
  - C) inferior.
  - D) normal.

Answer: C

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 27) If a 5 percent increase in income leads to a 10 percent increase in quantity demanded for airline travel, then airline travel is
- A) a necessity.
  - B) a substitute for another good.
  - C) a luxury.
  - D) an inferior good.

Answer: C

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 28) If a 6 percent increase in income leads to a 4 percent increase in quantity demanded for audio books the income elasticity of demand is
- A)  $-0.67$ .
  - B)  $0.67$ .
  - C)  $1.5$ .
  - D)  $2$ .

Answer: B

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 29) If a 5 percent increase in income leads to a 10 percent decrease in quantity demanded for a product this product is
- A) an income elastic good.
  - B) an inferior good.
  - C) a necessity.
  - D) a luxury good.

Answer: B

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 30) If the quantity demanded for a good rises as income rises then the income elasticity of demand for this good is \_\_\_\_\_ than 0, and the good is \_\_\_\_\_ good.
- A) greater; an inferior  
B) less; a normal  
C) less; an inferior  
D) greater; a normal

Answer: D

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 31) Demand for a luxury item, such as a yacht, is likely to be
- A) both income and price inelastic.  
B) both income elastic and price elastic.  
C) income elastic and price inelastic.  
D) income inelastic and price elastic.

Answer: B

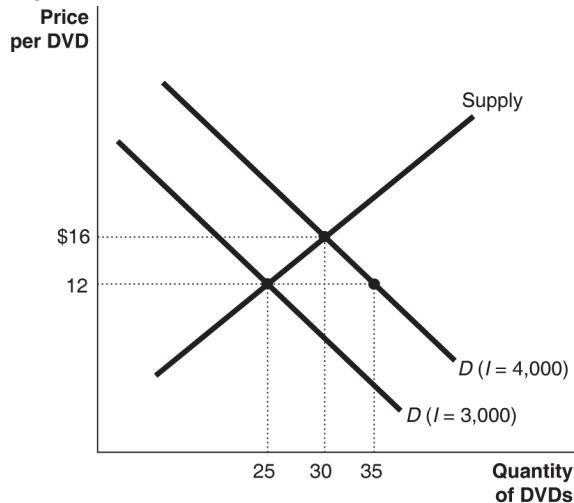
Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-9



- 32) Refer to Figure 6-9. The data in the diagram indicates that DVDs are
- A) luxury goods.  
B) inelastic goods.  
C) necessities.  
D) both luxury goods and inelastic goods.  
E) both necessities and inelastic goods.

Answer: A

Diff: 3 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 33) Suppose you have surveyed a few industries and obtained information about the income elasticity of demand for their products. If you expect that the economy is headed for a long recession, you would advise people to look for jobs in an industry with
- A) a high positive income elasticity coefficient such as 5.
  - B) a low positive income elasticity coefficient such as 0.8.
  - C) a "high" negative income elasticity coefficient such as  $-4$ .
  - D) a "low" negative income elasticity coefficient such as  $-0.2$ .

Answer: C

Diff: 3 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 34) Last year, Joan bought 50 pounds of hamburger when her household income was \$40,000. This year, her household income was only \$30,000 and Joan bought 60 pounds of hamburger. Holding everything else constant, Joan's income elasticity of demand for hamburger is
- A) positive, so Joan considers hamburger to be an inferior good.
  - B) negative, so Joan considers hamburger to be an inferior good.
  - C) positive, so Joan considers hamburger to be a normal good and a necessity.
  - D) negative, so Joan considers hamburger to be a normal good.

Answer: B

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 35) Which of the following items is likely to have the highest income elasticity of demand?
- A) a luxury cruise to several European countries
  - B) water
  - C) breakfast cereal
  - D) a hamburger

Answer: A

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 36) Suppose you are considering buying stock in the stock market, and your objective is to maximize your net worth. Furthermore, your study of the market reveals that the economy will be slowing down over the next several months. Under these conditions, it would be best to purchase stock in companies that produce
- A) normal goods.
  - B) luxury goods.
  - C) inferior goods.
  - D) price elastic goods.

Answer: C

Diff: 3 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 37) The cross-price elasticity of demand measures the
- A) absolute change in the quantity demanded of one good divided by the absolute change in the price of another good.
  - B) percentage change in the quantity demanded of one good divided by the percentage change in the price of another good.
  - C) percentage change in the price of one good divided by the percentage change in the quantity demanded of another good.
  - D) percentage change in the quantity demanded of one good in one location divided by the price of the same good in another location.

Answer: B

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 38) The cross-price elasticity of demand between Coca-Cola and Pepsi-Cola is calculated by dividing
- A) the percentage change in quantity demanded of Coca-Cola by the percentage change in the quantity demanded of Pepsi-Cola.
  - B) the percentage change in the price of Pepsi-Cola by the percentage change in quantity demanded of Coca-Cola.
  - C) the percentage change in the price of Coca-Cola by the percentage change in the price of Pepsi-Cola.
  - D) the percentage change in the quantity demanded of Coca-Cola by the percentage change in the price of Pepsi-Cola.

Answer: D

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 39) In order to prove that Motrin and Ibuprofen are substitutes, one should measure the \_\_\_\_\_ and get a \_\_\_\_\_.
- A) cross-price elasticity; positive number
  - B) cross-price elasticity; negative number
  - C) price elasticity of demand; number greater than 1 (in absolute value)
  - D) price elasticity of demand; number less than 1 (in absolute value)

Answer: A

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

40) The cross-price elasticity between Gillette razors and a related good is  $-3.4$ . What happens to the demand for the related good if the price of Gillette razors falls by 10 percent?

- A) The quantity demanded of the related good rises by 3.4 percent.
- B) The quantity demanded of the related good falls by 34 percent.
- C) The quantity demanded of the related good rises by 34 percent.
- D) The quantity demanded of the related good falls by 3.4 percent.

Answer: C

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

41) If the cross-price elasticity of demand between beer and wine is 0.31, then beer and wine are

- A) complements.
- B) price inelastic goods.
- C) substitutes.
- D) necessities.

Answer: C

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

42) Consider the following pairs of items:

- a. shampoo and conditioner
- b. iPhones and earbuds
- c. a laptop computer and a desktop computer
- d. beef and pork
- e. air-travel and weed killer

Which of the pairs listed will have a positive cross-price elasticity?

- A) a and b only
- B) c and d only
- C) e only
- D) a, b, and c only

Answer: B

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

43) Which of the following pairs of goods is likely to have a negative cross-price elasticity of demand?

- A) pancakes and syrup
- B) hot dogs and hamburgers
- C) orange juice and grapefruit juice
- D) peanuts and cat food

Answer: A

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 44) When the price of tortilla chips rose by 10 percent, the quantity of tortilla chips sold fell 4 percent, and the sale of dips (like salsa and bean dip) fell 8 percent. This set of facts indicates that
- A) the cross-price elasticity between tortilla chips and dips is 0.8, so the two are substitutes.
  - B) the cross-price elasticity between tortilla chips and dips is -0.4, so the two are complements.
  - C) the cross-price elasticity between tortilla chips and dips is -0.8, so the two are complements.
  - D) the cross-price elasticity between tortilla chips and dips is 0.4, so the two are substitutes.

Answer: C

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 45) Suppose the cross-price elasticity of demand between DVDs at Amazon.com and DVDs at Buy.com is 3.5. Based on this information, predict what happens when Amazon.com lowers its DVD prices by 10 percent.
- A) The quantity of DVDs demanded on Amazon.com will increase by 35 percent.
  - B) The quantity of DVDs demanded on Buy.com will increase by 35 percent.
  - C) The quantity of DVDs demanded on Amazon.com will decrease by 35 percent.
  - D) The quantity of DVDs demanded on Buy.com will decrease by 35 percent.

Answer: D

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 46) During an economic expansion as consumer incomes rise, holding everything else constant,
- A) the demand for most goods, except luxuries, will rise.
  - B) the demand for luxuries will rise while the demand for inferior goods will fall.
  - C) the demand for luxuries and inferior goods will rise.
  - D) the prices of luxuries will fall while the prices of inferior goods will rise.

Answer: B

Diff: 1 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 47) Studies show that the income elasticity of demand for wine is 5.03 and the income elasticity of demand for spirits is 1.21. This indicates that
- A) wine and spirits are luxury goods.
  - B) wine is a luxury good and spirits are inferior goods.
  - C) wine and spirits are highly price elastic.
  - D) wine is a luxury good and spirits are necessities.

Answer: A

Diff: 2 Page Ref: 186–187

Topic: Income Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 48) Barbara, the consummate hostess, proudly announced as she served dessert, "A port is often the perfect end to a meal, sipped with a piece of my scrumptious chocolate cake." Evidently, Barbara views

- A) port and chocolate cake as luxury items.
- B) port and chocolate cake as necessities.
- C) port and chocolate cake as complementary goods.
- D) port and chocolate cake as substitutes to other desserts.

Answer: C

Diff: 2 Page Ref: 185–186

Topic: Cross–Price Elasticity of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Written and oral communication

- 49) Economists estimated that the cross–price elasticity of demand for beer and wine is  $-0.83$  and the income elasticity of wine is  $5.03$ . This means that

- A) beer and wine are substitutes and wine is an inferior good.
- B) beer and wine are complements and wine is a luxury good.
- C) beer and wine are substitutes and wine is a luxury good.
- D) beer and wine are complements and wine is an inferior good.

Answer: B

Diff: 2 Page Ref: 186–187

Topic: Cross–Price and Income Elasticities of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 50) Economists have estimated that the cross–price elasticity of demand between beer and spirits is  $-0.50$ , the income elasticity for spirits is  $1.21$  and the income elasticity for wine is  $5.03$ . These elasticities mean that

- A) beer and spirits are complements, spirits and wine are luxuries.
- B) beer and spirits are normal goods, spirits and wine are luxuries.
- C) beer and spirits are complements, spirits are substitutes.
- D) beer and spirits are substitutes, spirits and wine are luxuries.

Answer: A

Diff: 2 Page Ref: 186–187

Topic: Cross–Price and Income Elasticities of Demand

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 51) Demand for staples such as dairy products and bread is likely to be both income and price inelastic.

Answer: TRUE

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 52) In recent years, the prices of new domestically produced cars have been falling. Suppose consumers respond by reducing their demand for used cars and mass transport services such as bus travel. This information suggests that the cross-price elasticity between new cars and used cars, and the cross-price elasticity between new cars and bus travel are negative.

Answer: FALSE

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 53) In the alcohol industry, both wine and spirits are considered to be substitutes for beer.

Answer: FALSE

Diff: 2 Page Ref: 186–187

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 54) The absolute value of the price elasticity of demand for telescopes is 1.5. Therefore, telescopes can be classified as a luxury.

Answer: FALSE

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 55) If the income elasticity for canned food is 0.8, then canned food is an inferior good.

Answer: FALSE

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 56) If the cross-price elasticity of demand for goods A and B is zero, this means the two goods are unrelated.

Answer: TRUE

Diff: 1 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 57) A recent study indicated that "Stricter college alcohol policies such as raising the price of alcohol, or banning alcohol on campus, decreases the number of students who use marijuana." This indicates that the cross-price elasticity between alcohol and marijuana is positive.

Answer: FALSE

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 58) What factors would make you more sensitive or less sensitive to price when purchasing gasoline?

Answer: A number of factors are likely to affect your sensitivity to changes in gasoline prices, including your income level, whether you live in an area with good public transportation, and whether you live within walking distance of your school or job.

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 59) Explain the concepts of cross-price elasticity of demand and income elasticity of demand. What do positive and negative values indicate for each of these demand elasticities ?

Answer: Cross-price elasticity of demand measures the percentage change in quantity demanded of one good based on the percentage change in the price of another good. If cross price elasticity is positive, the two goods are substitutes. If cross-price elasticity is negative, the two goods are complements.

Income elasticity of demand measures the responsiveness of quantity demanded to changes in income. If income elasticity is positive but less than one, the product is a normal good and a necessity. If income elasticity is positive and greater than one, the product is a normal good and a luxury. If income elasticity is negative, the product is an inferior good.

Diff: 2 Page Ref: 185-187

Topic: Cross-Price and Income Elasticities of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 60) Suppose a 4 percent increase in income results in a 2 percent decrease in the quantity demanded of a good. Calculate the income elasticity of demand for the good and determine what type of good it is.

Answer: Income elasticity of demand =  $-0.5$ . The good is inferior.

Diff: 2 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 61) When the price of Starbucks coffee increased by 8 percent, the quantity demanded of Peets coffee increased by 10 percent. Calculate the cross price elasticity of demand between Starbucks coffee and Peets coffee. What is the relationship between the two products?

Answer: The cross price elasticity = 1.25. The two products are substitutes.

Diff: 2 Page Ref: 185

Topic: Cross-Price Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

**Table 6-6**

		Quantities Purchased	Quantities Purchased
Income	Prices	Good X	Good Y
\$30,000	$P_x = \$6, P_y = \$3$	2	20
50,000	$P_x = \$6, P_y = \$4$	5	10

- 62) Refer to Table 6-6.

a. Using the information in the table, calculate the income elasticity of demand for good X and characterize the good. Use the midpoint formula.

b. Can you calculate the income elasticity of demand for good Y? If you can, show your calculation and characterize the good. If you cannot, explain why.

Answer: a. The income elasticity of demand for good X =  $(3 / 3.5) / (20,000 / 40,000) = (0.8571 / 0.5) = 1.71$ . X is both a normal good and a luxury.

b. Since both income and  $P_y$  change, you cannot calculate the income elasticity for good Y. The income elasticity can be measured if a change in income causes the quantity of Y purchased to change, holding everything else constant.

Diff: 3 Page Ref: 186

Topic: Income Elasticity of Demand

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



## 6.5 Using Elasticity to Analyze the Disappearing Family Farm

- 1) Which of the following is one reason why the income of small family farms has decreased over time?
- A) Technology has increase farm productivity and market supply.
  - B) The demand for farm products is price elastic.
  - C) The demand for farm products is income inelastic.
  - D) The U.S. population has increased greatly since 1950.

Answer: B

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 2) Between 1950 and 2013 the number of acres devoted to wheat production in the United States \_\_\_\_\_ and the price of wheat \_\_\_\_\_.
- A) declined; decreased
  - B) more than doubled; increased by about 50 percent
  - C) declined; more than doubled
  - D) increased; more than doubled

Answer: A

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

- 3) The price of wheat has fallen since 1950. Which of the following explains this price decline?
- A) The price elasticity of demand is less than 1 (in absolute value) and the income elasticity of demand for wheat is low.
  - B) The price elasticity of demand is greater than 1 (in absolute value) and the income elasticity of demand for wheat is low.
  - C) The price elasticity of demand is less than 1 (in absolute value) and wheat is an inferior good.
  - D) The price elasticity of demand is greater than 1 (in absolute value) and the income elasticity of demand for wheat is greater than 1.

Answer: A

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 4) The demand for most farm products is relatively inelastic. All else constant, what is the effect on farm revenues as a result of the introduction of new and better farm equipment which increases in productivity?
- A) Farm revenues increase.
  - B) Farm revenues decrease.
  - C) Farm revenues remain constant because consumers will not increase their consumption of farm products by much.
  - D) Farm revenues could increase or decrease depending on the cost of this new equipment.

Answer: B

Diff: 3 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 5) Suppose a frost destroys the tomato crop in California but farmers see an increase in their revenues. Which of the following best explains this?
- A) The decrease in supply led to huge price increases.
  - B) Tomatoes are necessities.
  - C) The demand for tomatoes is price inelastic.
  - D) The cross-price elasticity between tomatoes and most other substitute vegetables is very low.

Answer: C

Diff: 3 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 6) Suppose the price of gasoline is \$3.50 per gallon, the quantity of gasoline demanded is 150 billion gallons per year, the price elasticity of demand for gasoline is  $-0.06$ , and the federal government decides to increase the excise tax on gasoline by \$1.00 per gallon, which increases the price of gasoline by \$0.75 per gallon. What is the new equilibrium quantity of gasoline demanded after the tax is imposed?
- A) 109.72 billion gallons per year
  - B) 127.25 billion gallons per year
  - C) 148.27 billion gallons per year
  - D) 161.61 billion gallons per year

Answer: C

Diff: 3 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 7) Suppose the price of gasoline is \$3.50 per gallon, the quantity of gasoline demanded is 150 billion gallons per year, the price elasticity of demand for gasoline is  $-0.06$ , and the federal government decides to increase the excise tax on gasoline by \$1.00 per gallon, which increases the price of gasoline by \$0.75 per gallon. How much revenue does the federal government receive from the tax?
- A) \$95.44 billion
  - B) \$111.20 billion
  - C) \$148.27 billion
  - D) \$161.61 billion

Answer: C

Diff: 3 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 8) From 1950 to 2013 the number of people who lived on farms fell from 23 million to fewer than 3 million? Which of the following factors have contributed to this trend?

- A) increases in the cost of farming and a desire for young adults to move to urban areas
- B) rapid growth in farm production and low income and price elasticities for food products
- C) slow growth in agricultural productivity and low income elasticities for food products
- D) government policies that have increased the cost of living and working on farms

Answer: B

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 9) Between 1950 and 2013 the productivity of wheat farmers in the United States more than doubled. This means that

- A) the amount of land and other resources devoted to wheat production more than doubled.
- B) the incomes of wheat farmers more than doubled.
- C) the total amount of wheat produced more than doubled.
- D) the amount of wheat produced by the average farmer more than doubled.

Answer: D

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 10) The paradox of American farming is

- A) the demand for imported luxury food products has risen as the demand for domestic food products has fallen.
- B) the demand for food has risen as the number of people who pursue farming as a career has fallen.
- C) food has become cheaper and more abundant as the number of farms has decreased.
- D) the amount of food produced has increased as the average farm size has fallen.

Answer: C

Diff: 1 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 11) Since 1950 there has been a substantial increase in wheat production. The increase in production has led to a decrease in the price of wheat because of which of the following factors?

- A) The absolute value of the price elasticity of demand for wheat is less than 1 and the income elasticity of demand for wheat is greater than 1.
- B) The absolute value of the price elasticity of demand for wheat is greater than 1 and wheat is a close substitute for other food products.
- C) The absolute value of the price elasticity of demand for wheat is less than 1 and the income elasticity of demand for wheat is low.
- D) The income elasticity of demand for wheat is high and wheat is an inferior good.

Answer: C

Diff: 3 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 12) Assume that the price elasticity of demand for gasoline is  $-0.06$ . If the government tax causes the price of gasoline to increase by 50 percent, what will be the decrease in the quantity of gasoline demanded?

A) 0.5 percent                      B) 3.0 percent                      C) 8.33 percent                      D) 50 percent

Answer: B

Diff: 2 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 13) Assume that a 50 percent gasoline tax led to a large increase in its price and only a small decrease in the quantity of gasoline demanded. Economic analysis would lead one to conclude that

A) gasoline should be taxed because the benefits of the tax would exceed the costs.  
B) gasoline should not be taxed because the benefits are uncertain.  
C) gasoline should not be taxed on ethical grounds since ethical benefits and costs can't be measured.  
D) the benefits of taxing gasoline is a normative issue. Economic analysis can be used to contribute to discussion of this issue but cannot decide it.

Answer: D

Diff: 1 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 14) The demand for most farm products is relatively inelastic. A drought that reduces the supply of farm products will also cause farm revenues to fall.

Answer: FALSE

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 15) Most food products have low income and price elasticities of demand.

Answer: TRUE

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) The government of Bassaland is looking for new revenue sources. It is considering imposing an excise tax on two goods: palm wine and diapers. If the price elasticity of demand for the goods are  $-0.47$  and  $-1.89$  respectively, which good should it tax if the goal is to raise revenue? If the government wants to tax only one good, which good should it tax if the goal is to discourage consumption? Explain your answer.

Answer: If the goal is to raise revenue, it should tax palm wine. The demand for palm wine is inelastic, so an increase in its price will result in an increase in revenue. If the goal is to discourage consumption it should tax diapers since the demand for diapers is elastic, while the demand for palm wine is inelastic.

Diff: 2 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 17) A study of the effects of the minimum wage on employment of low-skilled workers estimated the price elasticity of demand for low-skilled workers is  $-0.75$ . Suppose that the government is considering raising the minimum wage from \$7.25 per hour to \$7.75 per hour. Based on this information, calculate the percentage change in the employment of low skilled workers. Use the midpoint formula.

Answer: percent change in quantity demanded =  $-5$  percent.

Diff: 3 Page Ref: 187

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 18) Suppose the price elasticity of demand for methamphetamine is  $-0.35$ . If decriminalization caused the price of methamphetamine to fall by 75 percent, what will be the percentage increase in the quantity of methamphetamine demanded? If the price elasticity is  $-3.5$ , what will be the percentage increase in quantity demanded?

Answer: If price elasticity of demand is  $-0.35$ , a 75 percent drop in price would increase the quantity demanded by 26.25 percent.

If price elasticity of demand is  $-3.5$ , a 75 percent drop in price would increase the quantity demanded by 262.5 percent.

Diff: 2 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 19) Suppose the price elasticity of demand for cigarettes is  $-0.4$ . The FDA decides to regulate tobacco production, which increases the price of cigarettes and causes the quantity of cigarettes demanded to decrease by 25 percent. What is the percentage increase in price which would lead to the 25 percent decrease in quantity demanded? If the price elasticity was  $-4$ , what would be the percentage increase in price?

Answer: If price elasticity of demand is  $-0.4$ , a 25 percent decrease in quantity demanded would result from a 62.5 increase in price.

If price elasticity of demand is  $-4$ , a 25 percent decrease in quantity demanded would result from a 6.25 increase in price.

Diff: 3 Page Ref: 188–189

Topic: Elasticity and Economic Issues

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

## 6.6 The Price Elasticity of Supply and Its Measurement

- 1) The price elasticity of an upward-sloping supply curve is always
- A) positive.
  - B) negative.
  - C) greater than one.
  - D) impossible to determine.

Answer: A

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 2) Price elasticity of supply is used to gauge
- A) how responsive suppliers are to price changes.
  - B) how responsive suppliers are to changes in future prices.
  - C) how responsive suppliers are to a change in demand.
  - D) how responsive sales are to a change in input prices.

Answer: A

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 3) The price elasticity of supply is equal to
- A) the value of the slope of the supply curve.
  - B) the change in quantity supplied divided by the change in price.
  - C) the percentage change in price divided by the percentage change in quantity supplied.
  - D) the percentage change in quantity supplied divided by the percentage change in price.

Answer: D

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 4) Suppose the value of the price elasticity of supply is 4. What does this mean?
- A) A 4 percent increase in the price of the good causes quantity supplied to increase by 1 percent.
  - B) A 1 percent increase in the price of the good causes the supply curve to shift upward by 4 percent.
  - C) A 1 percent increase in the price of the good causes quantity supplied to increase by 4 percent.
  - D) For every \$1 increase in price, quantity supplied increases by 4 units.

Answer: C

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 5) Suppose a 4 percent increase in price results in a 2 percent increase in the quantity supplied of a good. Calculate the price elasticity of supply and characterize the product.

A) 2; The product is elastic.

B) 0.2; The product is inelastic.

C) 0.5; The product is inelastic.

D) 50%; The product is inelastic.

Answer: C

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 6) Suppose that the price of a money clip increases from \$0.75 to \$0.90 and quantity supplied rises from 8,000 units to 10,000 units. Use the midpoint formula to calculate the price elasticity of supply.

A) 1.22

B) 1.0

C) 0.82

D) 0.07

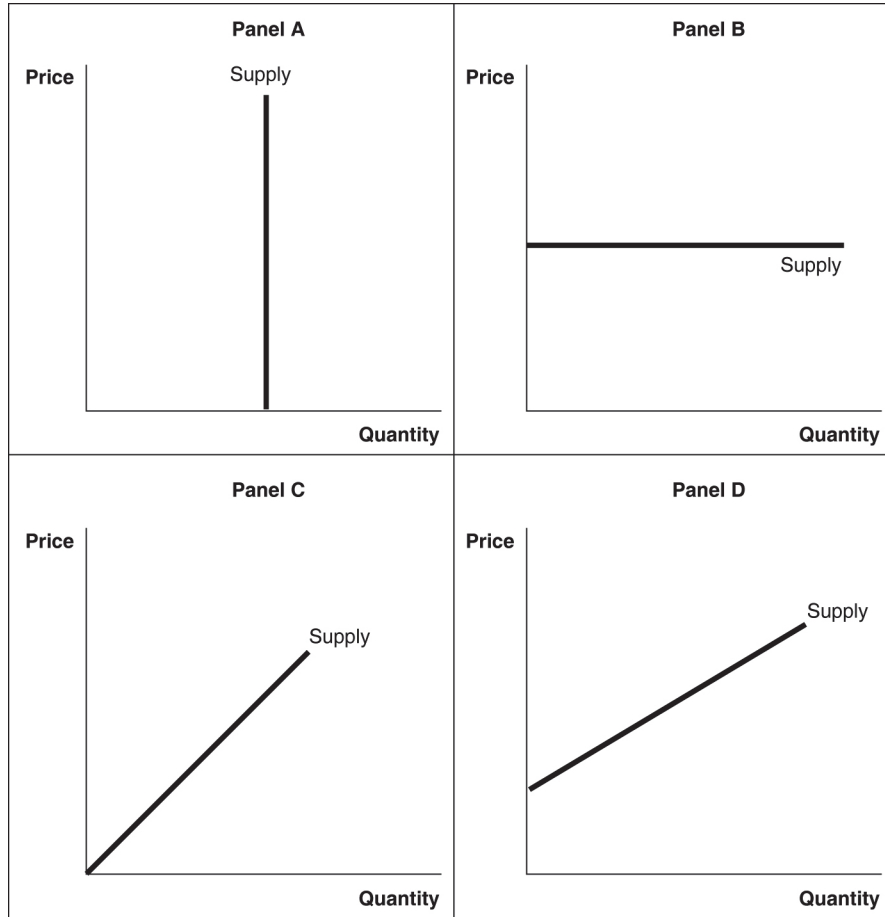
Answer: A

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

**Figure 6–10**

7) Refer to Figure 6–10. The supply curve on which price elasticity changes at every point is shown in

- A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: D

Diff: 1      Page Ref: 192

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

8) Refer to Figure 6–10. A perfectly elastic supply curve is shown in

- A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: B

Diff: 1      Page Ref: 192

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking



- 9) **Refer to Figure 6-10.** A perfectly inelastic supply curve is shown in

A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: A

Diff: 1      Page Ref: 192

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 10) **Refer to Figure 6-10.** A unit-elastic supply curve is shown in

A) Panel A.                      B) Panel B.                      C) Panel C.                      D) Panel D.

Answer: C

Diff: 1      Page Ref: 192

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 11) The price elasticity of the supply of teenage labor services is approximately 1.36. Suppose the minimum wage rises from \$7.25 per hour to \$8.75. Using the midpoint formula, calculate the approximately change in the quantity supplied of teenage labor.

A) 7.3 percent  
B) 14.4 percent  
C) 25.5 percent  
D) There is insufficient information to answer the question.

Answer: C

Diff: 3      Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 12) An increase in the demand for green tea raises the price of apples from \$16 a pound to \$20 a pound. As a result, quantity supplied increases by 30 percent. Using the midpoint formula, calculate the value of the price elasticity of supply?

A) 1.35                      B) 1.875                      C) 2.22                      D) 7.5

Answer: A

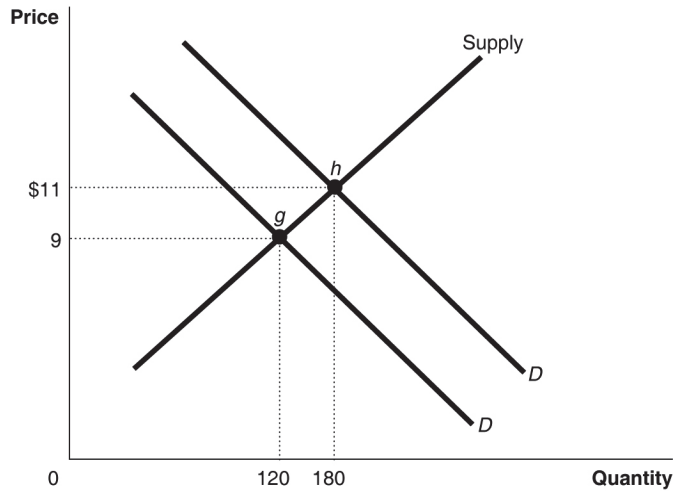
Diff: 3      Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

Figure 6-11



- 13) Refer to Figure 6-11. What is the value of the price elasticity of supply between  $g$  and  $h$ ?
- A) 20 percent                      B) 0.5                      C) 2                      D) 0.02

Answer: C

Diff: 2      Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 14) The price elasticity of supply for umbrellas is 2. Suppose you're told that following a price increase, quantity supplied increased by 30 percent. What was the percentage change in price that brought this about?
- A) 60 percent  
B) 15 percent  
C) 6.7 percent  
D) impossible to determine without additional information

Answer: B

Diff: 2      Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 15) If, for a given percentage increase in price, quantity supplied increases by a proportionately larger percentage, then supply is
- A) unit-elastic.                      B) perfectly elastic.  
C) relatively inelastic.                      D) elastic.

Answer: D

Diff: 2      Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 16) If firms do not increase their quantity supplied when price changes, then supply is
- A) perfectly elastic.
  - B) perfectly inelastic.
  - C) relatively inelastic.
  - D) elastic.

Answer: B

Diff: 2 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 17) If, for a given percentage decrease in price, quantity supplied decreases by a proportionately smaller percentage, then supply is
- A) unit-elastic.
  - B) perfectly elastic.
  - C) relatively inelastic.
  - D) elastic.

Answer: C

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 18) Bringing oil to the market is a relatively long and costly process. The whole process from exploration to pumping significant amounts of oil can take years. What does this indicate about the price elasticity of supply for oil?
- A) The elasticity coefficient is likely to be very high and supply is inelastic.
  - B) The elasticity coefficient is likely to be close to zero and supply is perfectly elastic.
  - C) The elasticity coefficient is likely to be low and supply is highly inelastic.
  - D) The elasticity coefficient is likely to be low and supply is highly elastic.

Answer: C

Diff: 2 Page Ref: 190–191

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 19) Over longer periods of time, increases in oil prices provide firms with incentives to explore and recover oil. What does this indicate about the long run price elasticity of supply for oil?
- A) The elasticity coefficient is likely to be higher in the long run than in the short run.
  - B) The elasticity coefficient is likely to be lower in the long run than in the short run.
  - C) The elasticity coefficient approaches 0 in the long run as supplies are depleted.
  - D) The elasticity coefficient is unstable in the long run because oil supplies may be depleted.

Answer: A

Diff: 2 Page Ref: 190–191

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 20) Suppose at the going wage rate of \$20 per hour, firms can hire as many hours of janitorial services as it desires. If any firm tries to lower the wage rate to \$19, it will not be able to hire any janitor. What does this indicate about the supply curve for janitorial services?

A) Supply is unit-elastic. B) Supply is perfectly elastic.  
C) Supply is perfectly inelastic. D) Supply is relatively inelastic.

Answer: B

Diff: 2 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 21) Suppose the demand curve for a product is represented by a typical downward-sloping curve. Now suppose the demand for this product decreases. Which of the following statements accurately predicts the resulting decrease in price?

A) The more elastic the supply curve, the greater the price increase.  
B) The more elastic the supply curve, the smaller the price decrease.  
C) The increase in price is not affected by the elasticity of the supply curve.  
D) The decrease in price will always be proportional to the magnitude of the demand shift.

Answer: B

Diff: 3 Page Ref: 193

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 22) The price elasticity of supply measures

A) the responsiveness of quantity supplied to changes in input prices.  
B) the responsiveness of quantity supplied to changes in technology.  
C) the responsiveness of quantity supplied to changes in price.  
D) a supplier's ability to produce a good in the face of scarcity.

Answer: C

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 23) To calculate the price elasticity of supply we divide

A) the percentage change in price by the percentage change in quantity supplied.  
B) the percentage change in quantity supplied by the percentage change in price.  
C) rise by the run.  
D) the average price by the average quantity supplied.

Answer: B

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 24) Suppose the supply of bicycles is price elastic. This means that
- A) consumers will respond significantly to an increase in the quantity supplied of bicycles.
  - B) suppliers will increase the quantity supplied of bicycles, but not immediately.
  - C) suppliers face many substitutes for bicycles.
  - D) suppliers will respond significantly to changes in the price of bicycles.

Answer: D

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 25) If the quantity supplied of walkie-talkies increases by 5 percent when prices increase by 12 percent, then
- A) the supply of walkie-talkies is inelastic.
  - B) the supply of walkie-talkies is elastic.
  - C) the walkie-talkie supply curve will shift to the right.
  - D) the walkie-talkie supply curve will shift to the left.

Answer: A

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 26) Suppose when the price of jean-jackets increased by 10 percent, the quantity supplied increased by 16 percent. Based on this information the price elasticity of supply of jean-jackets is
- A) 0.625.
  - B) 6%.
  - C) 1.6.
  - D) 1.6%.

Answer: C

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 27) If an 8 percent decrease in the price of lobster leads to a 15 percent decrease in the quantity supplied of lobster, then the supply of lobster is
- A) unit-elastic.
  - B) unitarily elastic.
  - C) elastic.
  - D) perfectly inelastic.

Answer: C

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

28) Inelastic supply occurs whenever the elasticity of supply value is

- A) negative and  $< -1$ .
- B) any positive number.
- C) positive and  $> 1$ .
- D) positive and  $< 1$ .

Answer: D

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

29) If a supply curve is a horizontal line, supply is said to be

- A) perfectly inelastic.
- B) unit-elastic.
- C) inelastic.
- D) perfectly elastic.

Answer: D

Diff: 1 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

30) A supply curve that is vertical

- A) is perfectly elastic.
- B) is perfectly inelastic.
- C) is impossible.
- D) has an elasticity equal to 1.

Answer: B

Diff: 1 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Table 6-7

Price	Quantity Demanded	Quantity Supplied
\$6	5,000	2,000
7	4,000	2,000
8	3,000	2,000
9	2,000	2,000
10	1,000	2,000

The town of Bloomfield is well known for its basketball team. The price of basketball game tickets is determined by market forces. Table 6-7 above shows the demand and supply schedules for basketball games tickets.

31) Refer to Table 6-7. What is the most distinctive feature of the supply curve?

- A) The supply curve is perfectly inelastic.
- B) The supply curve is horizontal.
- C) The supply curve is upward sloping.
- D) The supply curve is perfectly elastic.

Answer: A

Diff: 2 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 32) Refer to Table 6-7. What is the numerical value of the price elasticity of supply?
- A) 1
  - B) greater than 0 but less than 1
  - C) 0
  - D) greater than 1

Answer: C

Diff: 2 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 33) The price elasticity of supply is usually a positive number because
- A) quantity supplied increases in response to income increases.
  - B) quantity supplied increases in response to price increases.
  - C) the quantity demanded usually rises when price falls and therefore suppliers would want to capitalize on this increase in demand.
  - D) price rises when supply increases.

Answer: B

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 34) The price elasticity of supply of hot dog buns is estimated to be 1.5. Holding everything else constant, this means that a 10 percent decrease in the price of hot dog buns will cause the quantity of hot dog buns supplied to decrease by
- A) 1.5 percent.
  - B) 15 percent.
  - C) approximately 25 percent.
  - D) approximately 5 percent.

Answer: B

Diff: 2 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 35) Which of the following is a key determinant of the price elasticity of supply?
- A) the slope of the supply curve
  - B) the availability of substitutes in production
  - C) the available technology
  - D) the time it takes to change output in response to a change in price

Answer: D

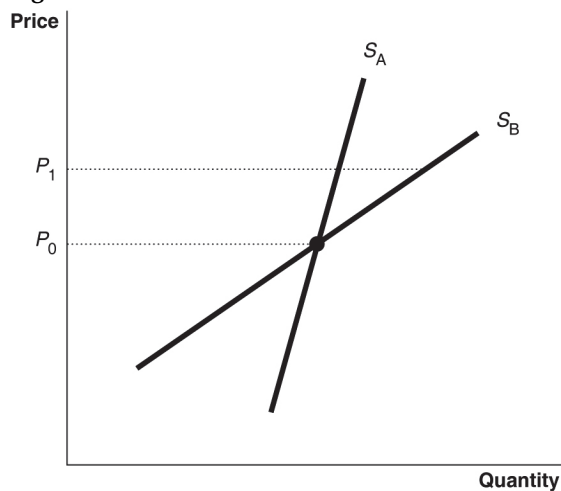
Diff: 2 Page Ref: 190

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

Figure 6-12



36) Refer to Figure 6-12. Suppose the diagram shows the supply curves for a product in the short run and in the long run. Which supply curve represents supply in the short run and which curve represents supply in the long run?

- A)  $S_B$  represents supply in the short run and  $S_A$  represents supply in the long run.
- B) Either  $S_A$  or  $S_B$  could represent supply in the short run; in the long run the supply curve must be a vertical line.
- C) Either  $S_A$  or  $S_B$  could represent supply in the long run; in the short run the supply curve must be a horizontal line.
- D)  $S_A$  represents supply in the short run and  $S_B$  represents supply in the long run.

Answer: D

Diff: 2 Page Ref: 190

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

37) Refer to Figure 6-12. The diagram shows two supply curves,  $S_A$  and  $S_B$ . As price rises from  $P_0$  to  $P_1$ , which supply curve is more elastic?

- A)  $S_A$
- B)  $S_B$
- C) They are equally inelastic.
- D) They are equally elastic.

Answer: B

Diff: 1 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

38) Suppose the demand curve for a product is represented by a typical downward-sloping curve. Now suppose the demand for this product increases. Which of the following statements accurately predicts the resulting increase in price?

- A) The more elastic the supply curve, the greater the price increase.
- B) The more elastic the supply curve, the smaller the price increase.
- C) The increase in price is not affected by the elasticity of the supply curve.



D) There will be no increase in price if the supply curve is perfectly inelastic.

Answer: B

Diff: 3 Page Ref: 193

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

39) Suppose the demand curve for hybrid cars shifts to the right. This will cause a relatively small increase in the price of hybrid cars if

- A) demand is elastic and supply is inelastic.
- B) demand is inelastic and supply is elastic.
- C) both demand and supply are inelastic.
- D) both demand and supply are elastic.

Answer: D

Diff: 3 Page Ref: 193

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

40) The process involved in bringing oil to world markets can take years. Substitutes for oil-based products such as gasoline are limited. As a result

- A) the supply of oil is very elastic and the demand for oil is very elastic over short periods of time.
- B) the supply of oil is very inelastic and the demand for gasoline is inelastic over short periods of time.
- C) the supply of oil and the demand for oil shift to the right over short periods of time.
- D) the supply of oil and the demand for oil are both perfectly elastic over short periods of time.

Answer: B

Diff: 2 Page Ref: 190–191

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

41) Shifts in the supply of oil have caused large changes in price since the 1970s because

- A) the supply of oil is very inelastic while the demand for oil is very elastic over short periods of time.
- B) the supply of oil is very elastic while the demand for oil is inelastic over short periods of time.
- C) both the supply of oil and the demand for oil are inelastic over short periods of time.
- D) the supply of oil and the demand for oil are perfectly elastic over short periods of time.

Answer: C

Diff: 2 Page Ref: 190–191

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

42) Which of the following statements is *true*?

- A) The supply of oil is very elastic over short time periods but becomes perfectly inelastic over time. A given shift in supply results in a greater increase in the price of oil when the supply of oil is perfectly inelastic.
- B) The supply of oil is very inelastic over short time periods but becomes more elastic over time. A given shift in supply results in a smaller increase in the price of oil when the supply is more elastic.
- C) The supply of oil is perfectly inelastic; therefore, as the demand for oil increases over time the price of oil increases significantly.
- D) Over short periods of time increases in the demand for oil are greater than increases in the supply of oil. Over the long run increases in the demand and the supply of oil are about equal. As a result, the price of oil increases greatly in the short run but is stable in the long run.

Answer: B

Diff: 2 Page Ref: 190–191

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

43) The price elasticity of supply is calculated as the change in supply divided by the change in price.

Answer: FALSE

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

44) Suppose the supply curve for digital cameras shifts to the right. This will cause a relatively large decrease in the price of digital cameras if both demand and supply are inelastic.

Answer: TRUE

Diff: 3 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

45) The value of the price elasticity of supply depends primarily on how quickly firms can acquire inputs to increase quantity supplied when price increases.

Answer: TRUE

Diff: 1 Page Ref: 190

Topic: Determinants of the Price Elasticity of Supply

Learning Outcome: Micro–6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 46) Supply is elastic whenever the elasticity value for supply is positive and greater than 1.

Answer: TRUE

Diff: 1 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 47) There are a limited number of original Picasso paintings. This means that the supply of original Picasso paintings is perfectly inelastic.

Answer: TRUE

Diff: 1 Page Ref: 191

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 48) Explain the economic concept of price elasticity of supply. How is price elasticity of supply calculated?

Answer: Price elasticity of supply refers to the responsiveness of the quantity of a product supplied to a change in price. Price elasticity of supply is calculated by dividing the percentage change in the quantity of a product supplied by the percentage change in the product's price.

Diff: 3 Page Ref: 189

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 49) Suppose the current price of oil is \$90 a barrel and the quantity supplied is 800 million barrels per day. If the price elasticity of supply for oil in the short run is estimated at 0.5, use the midpoint formula to calculate the percentage change in quantity supplied when the price of oil rises to \$98 a barrel.

Answer: The percentage change in quantity supplied =  $[(98 - 90) / (98 + 90) / 2] \times 0.5 \times 100 = (8 / 94) \times 0.5 \times 100 = 4.26$  percent.

Diff: 3 Page Ref: 193

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 50) Suppose the current price of copper is \$3 per pound and the quantity supplied is 200 pounds per day. If the price of copper falls to \$2.50 per pound, the quantity supplied drops to 180 pounds per day. Use the midpoint formula to calculate the price elasticity of supply for copper.

Answer: The price elasticity of supply for copper =  $(20 / 190) / (0.5 / 2.75) = (0.1053 / 0.1818) = 0.58$ .

Diff: 2 Page Ref: 189

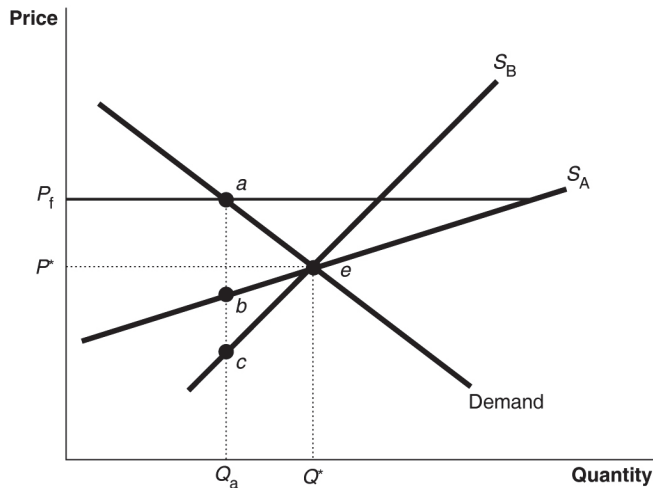
Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

- 51) For a given demand curve, will there be a greater loss of economic efficiency from a binding price floor when supply is elastic or inelastic? Illustrate your answer with a demand and supply graph. In your graph you must show two supply curves, one elastic and the other inelastic.

Answer:



See the figure above.  $S_A$  is the elastic supply curve, and  $S_B$  the inelastic supply curve. For a given demand curve, a binding price floor at  $P_f$  creates a greater loss of economic efficiency when supply is inelastic rather than elastic. This can be seen from the diagram: When the supply curve is  $S_A$  (elastic) the loss in economic efficiency is represented by the area *abe* while the loss in economic efficiency is represented by the area *ace* when the supply curve is  $S_B$  (inelastic).

Diff: 3 Page Ref: 193

Topic: Price Elasticity of Supply

Learning Outcome: Micro-6: Explain the fundamentals of the elasticity of supply and demand and the applications of both.

AACSB: Analytic thinking

# Chapter 7

## The Economics of Health Care

### 7.1 The Improving Health of People in the United States

- 1) Over the past 160 years in the United States, life expectancy
- A) has remained fairly constant.
  - B) has slightly declined.
  - C) has more than doubled.
  - D) increased up to the 1950s and then declined for the next 60 years.

Answer: C

Diff: 1 Page Ref: 206

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 2) In 2013, health care made up \_\_\_\_\_ of the U.S. economy
- A) about 2 percent
  - B) roughly 8 percent
  - C) more than one-sixth
  - D) almost two-thirds

Answer: C

Diff: 1 Page Ref: 206

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 3) On average, people in high-income countries \_\_\_\_\_ than people in low-income countries.
- A) have a shorter life expectancy
  - B) are subject to a higher infant mortality rate
  - C) are taller
  - D) are exposed to more severe diseases

Answer: C

Diff: 1 Page Ref: 206

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 4) In the United States, doctors and hospitals that provide most health care are
- A) primarily private firms.
  - B) primarily employed by the government.
  - C) split evenly between private firms and employed by the government.
  - D) 100 percent employed by the government.

Answer: A

Diff: 1 Page Ref: 206

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 5) Between 1981 and 2011, the overall mortality rate in the United States
- A) decreased by more than 25 percent.
  - B) slowly but steadily increased.
  - C) remained fairly constant.
  - D) was similar to the average rate in most low-income countries.

Answer: A

Diff: 1 Page Ref: 207

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 6) A typical consumer of health care in the United States
- A) pays the full price of his or her health care.
  - B) pays more than the full price of his or her health care.
  - C) does not pay any of the price of his or her health care.
  - D) does not pay the full price of his or her health care.

Answer: D

Diff: 1 Page Ref: 207

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 7) In the United States from 1981 to 2011, deaths from all of the following declined substantially *except*
- A) cancer.
  - B) kidney disease.
  - C) heart attacks.
  - D) strokes.

Answer: B

Diff: 1 Page Ref: 208

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) In the United States from 1981 to 2011, deaths from diabetes increased largely due to the effects of
- A) foreign-produced insulin.
  - B) stress in the workplace.
  - C) a larger immigrant population.
  - D) increasing obesity.

Answer: D

Diff: 1 Page Ref: 208

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) The overall decline in death rates in the United States since 1981 was due to all of the following *except*
- A) a decline in smoking.
  - B) the decline in the population.
  - C) the availability of new prescription drugs.
  - D) new surgical techniques.

Answer: B

*Diff: 1 Page Ref: 208*

*Topic: Health in the United States*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

- 10) Better health allows people to work harder, which raises a country's total income. This indicates that in effect, better health
- A) is a primary cause of price increases.
  - B) reduces the incentive to work.
  - C) shifts out a country's production possibilities frontier.
  - D) increases consumer surplus.

Answer: C

*Diff: 1 Page Ref: 207*

*Topic: Health in the United States*

*Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.*

*AACSB: Analytic thinking*

- 11) Changes in the health of the average person are an important indicator of changes in the standard of living.

Answer: TRUE

*Diff: 1 Page Ref: 206*

*Topic: Health in the United States*

*Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.*

*AACSB: Analytic thinking*

- 12) The overall mortality rate in the United States has remained fairly constant for the past 30 years.

Answer: FALSE

*Diff: 1 Page Ref: 207*

*Topic: Health in the United States*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

- 13) Life expectancy at birth in the United States has more than doubled since 1850.

Answer: TRUE

*Diff: 1 Page Ref: 208*

*Topic: Health in the United States*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

- 14) Between 1981 and 2011, deaths from cancer have increased in the United States.

Answer: FALSE

*Diff: 1 Page Ref: 208*

*Topic: Health in the United States*

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

*AACSB: Analytic thinking*

- 15) How can changes over time of the average height of the people in a country help to indicate the standard of living in a country?

Answer: A person's height partly relies on nutritional status, which depends on a person's food intake relative to the work the person has to perform, whether the person is able to remain warm in cold weather, and the diseases to which the person is exposed. Height, then, can be used as a measure of health and well-being, and therefore a measure of the standard of living.

Diff: 2 Page Ref: 206

Topic: Health in the United States

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 16) How can improvements in health increase a country's total income?

Answer: Improvements in health make it possible for people to work harder as they become taller, stronger, and more resistant to disease. Working harder makes a country more productive and raises its total income.

Diff: 2 Page Ref: 207

Topic: Health in the United States

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 17) Briefly describe the most important differences between the market for health care and the market for other goods and services.

Answer: Doctors and hospitals that supply most health care are primarily private firms, as is true on the market for other goods and services, but with health care, the government also provides some services directly through the Veterans health Administration, and indirectly through Medicare and Medicaid. In the market for other goods and services, consumers pay the full market price, but in the market for health care, a typical consumer does not pay the full price because of health insurance.

Diff: 2 Page Ref: 207

Topic: Health in the United States

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

## 7.2 Health Care Around the World

- 1) In the United States in 2012, the percentage of people with private health insurance was about
- A) 17%. B) 29%. C) 74%. D) 83%.

Answer: C

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 2) In the United States in 2012, the percentage of people without any form of health insurance was about
- A) 16%. B) 29%. C) 64%. D) 83%.

Answer: A

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.



- 3) In the United States in 2012, the percentage of people who received health insurance through a government program was about
- A) 10%.                      B) 16%.                      C) 36%.                      D) 64%.

Answer: C

Diff: 1      Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 4) In the United States in 2012, the percentage of firms that employed more than 200 workers and offered health insurance as a fringe benefit to the workers was about
- A) 29%.                      B) 42%.                      C) 61%.                      D) 98%.

Answer: D

Diff: 1      Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 5) In the United States in 2012, the percentage of firms that employed between 3 and 199 workers and offered health insurance as a fringe benefit to the workers was about
- A) 29%.                      B) 42%.                      C) 61%.                      D) 98%.

Answer: C

Diff: 1      Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 6) In the United States in 2012, the percentage of people that directly purchased an individual or family health insurance policy from an insurance company was about
- A) 2%.                      B) 10%.                      C) 17%.                      D) 26%.

Answer: B

Diff: 1      Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 7) A contract under which a buyer agrees to make payments in exchange for the provider agreeing to pay some or all of the buyer's medical bills is referred to as
- A) a fee-for-service plan.                      B) the Affordable Care Act.  
C) a deductible.                      D) health insurance.

Answer: D

Diff: 1      Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 8) In the United States, private health insurance companies
- A) are all for-profit firms.
  - B) are all not-for-profit firms.
  - C) can be either for-profit or not-for-profit firms.
  - D) are all government-run firms.

Answer: C

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 9) In the United States in 2012, about two-thirds of those who were not covered by health insurance
- A) are single and unemployed.
  - B) live in families in which at least one member has a job.
  - C) live in families in which all members are unemployed.
  - D) are retired from the workforce.

Answer: B

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 10) In the United States in 2012, of those companies employing more than 200 workers that offer health care to those workers, about \_\_\_\_\_ percent of employees accept the coverage.
- A) 10
  - B) 36
  - C) 62
  - D) 98

Answer: C

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 11) Health insurance plans which typically reimburse doctors mainly by paying a flat fee per patient are known as
- A) fee-for-service plans.
  - B) preferred provider organizations.
  - C) single-health-payer systems.
  - D) health maintenance organizations.

Answer: D

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 12) The health care system in Canada is referred to as \_\_\_\_\_, and is a system in which the government provides national health insurance to all Canadian residents.
- A) an out-of-pocket system                      B) a single-payer health care system
- C) a universal health insurance system       D) socialized medicine

Answer: B

Diff: 1      Page Ref: 210

Topic: Health Care Around the World

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

AACSB: Analytic thinking

- 13) The health care system in Japan is referred to as \_\_\_\_\_, under which every resident of Japan is required to enroll in either a private or the government-provided health insurance program.
- A) an out-of-pocket system                      B) a single-payer health care system
- C) a universal health insurance system       D) socialized medicine

Answer: C

Diff: 1      Page Ref: 210

Topic: Health Care Around the World

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

AACSB: Analytic thinking

- 14) The health care system in the United Kingdom is referred to as \_\_\_\_\_, under which the government owns most of the hospitals and employs most of the doctors.
- A) an out-of-pocket system                      B) a single-payer health care system
- C) a universal health insurance system       D) socialized medicine

Answer: D

Diff: 1      Page Ref: 210

Topic: Health Care Around the World

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

AACSB: Analytic thinking

- 15) Most doctors and hospitals operate as private businesses in all of the following countries *except*
- A) Canada. B) Japan.  
C) the United Kingdom. D) the United States.

Answer: C

Diff: 1      Page Ref: 210

Topic: Health Care Around the World

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

- 16) Health insurance typically pays for most preventive care procedures in all of the following countries *except*
- A) Canada. B) Japan.  
C) the United Kingdom. D) the United States.

Answer: B

Diff: 1      Page Ref: 210

Topic: Health Care Around the World

*Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.*

17) In which of the following countries are substantial co-payments typically required as a part of the health care system?

- A) Canada and the United States
- B) Japan and Canada.
- C) the United States and Japan
- D) the United States and the United Kingdom

Answer: C

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

18) The largest government-run health care system in the world, with 1.7 million employees, is in

- A) Canada.
- B) Japan.
- C) the United Kingdom.
- D) the United States.

Answer: C

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-23: Discuss the economics of public goods and common resources.

19) Typically, the higher the level of income per person in a country, the higher the level of spending per person on health care. This relationship between income and spending indicates that health care is a

- A) normal good.
- B) inferior good.
- C) luxury.
- D) necessity.

Answer: A

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

20) In the United States, health care spending per person based on income per person is \_\_\_\_\_ the average for most other countries.

- A) slightly lower than
- B) significantly higher than
- C) significantly lower than
- D) comparable to

Answer: B

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

21) Of the following high-income countries, which has the lowest life expectancy at birth?

- A) Canada
- B) Japan
- C) the United Kingdom
- D) the United States

Answer: D

Diff: 1 Page Ref: 211-212

Topic: Health Care Around the World

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

22) Of the following high-income countries, which has the highest infant mortality rate?

- |                       |                      |
|-----------------------|----------------------|
| A) Canada             | B) Japan             |
| C) the United Kingdom | D) the United States |

Answer: D

Diff: 1 Page Ref: 211–212

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

23) Of the following high-income countries, which has the lowest mortality ratio for cancer?

- |                       |                      |
|-----------------------|----------------------|
| A) Canada             | B) Japan             |
| C) the United Kingdom | D) the United States |

Answer: D

Diff: 1 Page Ref: 211–212

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

24) Of the following high-income countries, which has the highest number of CT scanners per 1 million population?

- |                       |                      |
|-----------------------|----------------------|
| A) Canada             | B) Japan             |
| C) the United Kingdom | D) the United States |

Answer: B

Diff: 1 Page Ref: 211–212

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

25) Of the following high-income countries, which has the lowest number of MRI units per 1 million population?

- |                       |                      |
|-----------------------|----------------------|
| A) Canada             | B) Japan             |
| C) the United Kingdom | D) the United States |

Answer: C

Diff: 1 Page Ref: 211–212

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

26) A majority of people in the United States have private health insurance.

Answer: TRUE

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

27) In the United States in 2011, over 90 percent of people without health insurance were below the age of 34.

Answer: FALSE

Diff: 1 Page Ref: 209

Topic: Health Care Around the World

Learning Outcome: Micro–1: Identify the basic principles of economics and explain how to think like an economist.

- 28) On average, people in the United States spend a greater percentage of their income on health care than do people in most other countries.

Answer: TRUE

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 29) Canada has a single-payer health care system in which the government provides national health insurance to all Canadian residents.

Answer: TRUE

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 30) The Japanese system of universal health insurance requires no co-payments from residents for health services.

Answer: FALSE

Diff: 1 Page Ref: 210

Topic: Health Care Around the World

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 31) What are the main sources of health insurance in the United States?

Answer: The percentage of Americans covered by various types of health insurance are as follows:

Employer provided insurance: 64%.

Medicaid, VA, and Medicare: 36%.

Individual private insurance: 10%.

[Uninsured: 16%.]

Diff: 1 Page Ref: 209

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 32) Briefly explain 4 of the difficulties in making cross-country comparisons in health care outcomes.

Answer: Data problems: Countries do not always collect data on diseases and other health problems in the same way, so consistency problems can arise.

Problems with measuring health care delivery: Outcomes of many medical activities can be difficult to measure.

Problems with distinguishing health care effectiveness from lifestyle choices: Health care outcomes depend not only on the effectiveness of doctors and hospitals in delivering medical services, but also on individual's choices.

Problems with determining consumer preferences: In the market for health care, governments play a dominant role in supplying the service in most countries, so the cost of the service is not fully reflected in its price.

Diff: 2 Page Ref: 211-212

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

33) What is the main difference between a single-payer health care system and socialized medicine?

Answer: A single-payer health care system, such as the one in Canada, is one in which the government provides health insurance to all of the country's residents. Socialized medicine, such as the system in the United Kingdom, is a system in which the government owns most of the hospitals and employs most of the doctors.

Diff: 2 Page Ref: 211–212

Topic: Health in the United States

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

### 7.3 Information Problems and Externalities in the Market for Health Care

1) A key difficulty facing insurance companies is that people know more about their health than do insurance companies, and that those people who are seriously ill are the most likely to want to obtain health insurance. What is this phenomenon called?

- |                           |                           |
|---------------------------|---------------------------|
| A) moral hazard           | B) economic irrationality |
| C) asymmetric information | D) adverse selection      |

Answer: C

Diff: 1 Page Ref: 213

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

2) An insurance company is likely to attract customers like Clancy who want to purchase insurance because he knows better that the company that he is more likely to make a claim on a policy. What is the term used to describe the situation above?

- |                           |                           |
|---------------------------|---------------------------|
| A) moral hazard           | B) adverse selection      |
| C) asymmetric information | D) economic irrationality |

Answer: B

Diff: 1 Page Ref: 213

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

3) The term that is used to refer to a situation in which one party to an economic transaction has less information than the other party is

- |                                   |                            |
|-----------------------------------|----------------------------|
| A) inefficient market hypothesis. | B) moral hazard.           |
| C) information disparity.         | D) asymmetric information. |

Answer: D

Diff: 1 Page Ref: 213

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

4) Which of the following parties is likely to have the most information about the health of an individual who is trying to purchase a health insurance policy?

- |   |
|---|
| A) the company that issues the health insurance policy                                      |
| B) the individual who is applying for the health insurance policy                           |
| C) the employer of the individual who is trying to purchase the health insurance policy     |
| D) All parties in the health insurance market have access to the same level of information. |

Answer: B

Diff: 2 Page Ref: 213

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

5) What is adverse selection?

- A) It refers to the private, self-interested actions people take that people pursue, which when taken collectively leads to a loss in economic surplus.
- B) It refers to the actions people take after they have entered into a transaction that make the other party to the transaction worse off.
- C) It refers to the situation in which one party to a transaction takes advantage of knowing more than the other party to the transaction.
- D) It refers to the actions people take before they enter into a transaction so as to mislead the other party to the transaction.

Answer: C

Diff: 2 Page Ref: 213

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

6) Consider a used car market in which half the cars are good and half are bad (lemons). A rational buyer in this market should

- A) offer to pay a price equal to the most she would pay for a good car.
- B) offer to pay a price equal to the most she would pay for a lemon.
- C) offer to pay a price somewhere between the price she would pay for a good car and the price she would pay for a lemon.
- D) save up and buy a new car.

Answer: C

Diff: 2 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

7) Consider a used car market in which half the cars are good and half are bad (lemons). If buyers are rational, the prices being offered for used cars will result in

- A) an equal proportion of good cars and lemons being sold in an efficient market.
- B) a larger proportion of good cars being sold and consequently, consumer surplus is increased.
- C) a larger proportion of lemons being sold and consequently, producer surplus is increased.
- D) an equal proportion of good cars and lemons being sold in an inefficient market.

Answer: C

Diff: 2 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking



- 8) Consider a used car market in which half the cars are good and half are bad (lemons). Suppose the average price of a good car is \$9,000 and the average price of a lemon is \$3,000. If rational buyers are willing to pay \$6,000 for a used car, then sellers will agree to sell mostly the lemons at this price. What is the term used to describe this situation?

A) moral hazard  
B) adverse selection  
C) an efficient market  
D) economic irrationality

Answer: B

Diff: 2 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 9) Suppose that in a market for used cars, there are good used cars and bad used cars (lemons). Consumers are willing to pay as much as \$6,000 for a good used car but only \$1,000 for a lemon. Sellers of good used cars value their cars at \$5,000 each and sellers of lemons value their cars at \$800 each. Buyers cannot tell if a used car is reliable or is a lemon. Based on this information, what is the likely outcome in the market for used cars?

A) Sellers of good used cars will drop out of the market.  
B) Sellers of good used cars will incur losses.  
C) Sellers of lemons will drop out of the market.  
D) Used cars will sell for \$3,000.

Answer: A

Diff: 3 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 10) Adverse selection occurs in the market for used cars because used car buyers
- A) have more information than used car sellers.  
B) have less information than used car sellers.  
C) have less incentive to maintain the value of their cars than new car buyers.  
D) tend to have more accidents than new car buyers.

Answer: B

Diff: 1 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 11) If a buyer in an economic transaction has more information than the seller, the buyer benefits at the expense of the seller. This phenomenon is due to

A) moral hazard.  
B) adverse selection.  
C) economically irrational behavior.  
D) gains from trade.

Answer: B

Diff: 2 Page Ref: 213

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 12) If a state requires all drivers to purchase auto insurance, insurance companies still face the problem of
- A) correctly pricing their insurance.
  - B) sunk costs.
  - C) adverse selection.
  - D) excess demand for their insurance.

Answer: A

Diff: 2 Page Ref: 214

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 13) Which of the following is *not* an advantage of risk pooling?
- A) By insuring large groups as opposed to individuals, health insurance providers reduce adverse selection.
  - B) It gives very sick people in the group the same access to health care and to pay the same premiums as healthy individuals.
  - C) It is easier for an insurance company to estimate the average number of claims likely to be filed under a group policy than it is to predict the number of claims likely to be filed under an individual policy.
  - D) Individuals who are insured and therefore do not have to pay the full cost of health care services may be inclined to over-use those services.

Answer: D

Diff: 2 Page Ref: 214

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 14) The Pre-Existing Condition Insurance Plan is a federally administered part of the Affordable Care Act, and is designed for people with pre-existing medical conditions to obtain insurance. By offering health insurance to all U.S. citizens with pre-existing medical conditions, the Pre-Existing Condition Insurance Plan eliminates \_\_\_\_\_ for both the insurer and the insured, and eliminates \_\_\_\_\_ for the issuer of the insurance policy.
- A) the principal-agent problem; moral hazard
  - B) asymmetric information; adverse selection
  - C) adverse selection; the principal-agent problem
  - D) moral hazard; adverse selection

Answer: B

Diff: 2 Page Ref: 216

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 15) When people who buy insurance change their behavior after the purchase because they are protected from loss by the insurance, the insurance market is said to face the problem of
- A) moral hazard.
  - B) adverse selection.
  - C) asymmetric information.
  - D) economic irrationality.

Answer: A

Diff: 1 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 16) Which of the following individuals is most likely to purchase a life insurance policy that pays out an annual income beginning at a certain age until the individual's death?
- A) Ian, who expects to have a short life expectancy because of an illness
  - B) Bradley who has six young children
  - C) Avril, a tax attorney who wants to avoid adverse selection
  - D) Alma, who expects to live a long life, based on her family history

Answer: D

Diff: 2 Page Ref: 214

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 17) One reason why adverse selection problems arise in health insurance markets is that
- A) sick people are more likely to want health insurance than healthy people.
  - B) because of advances in medical technology, people are living longer. These medical advances are costly and drive up the price of insurance for everyone.
  - C) the average age of citizens of the United States has increased in recent years, and will continue to increase over the next 20 to 30 years. As older citizens retire, more and more of their medical bills will have to be paid by younger workers.
  - D) fewer men and women are choosing medical careers because of the increase in the cost of malpractice insurance.

Answer: A

Diff: 1 Page Ref: 214

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 18) The cost of group health insurance is lower than if an individual buys a policy on his own because
- A) the problem of adverse selection is reduced.
  - B) moral hazard costs of a group tend to move to a low average.
  - C) it is easier for the company to deny claims from a large group.
  - D) insuring a group eliminates the problem of buyers having more information than the seller.

Answer: A

Diff: 2 Page Ref: 215–216

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 19) Which of the following is *not* an advantage to an insurance company of insuring a large group of people for health insurance?
- A) The characteristics of a large group are likely to reflect those of the entire population.
  - B) It is easier to accurately predict the number of claims for a group than for an individual.
  - C) When all group members pay the premium, the problem of moral hazard is reduced.
  - D) When all group members pay the premium, the problem of adverse selection is reduced.

Answer: C

Diff: 2 Page Ref: 215–216

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

20) What is moral hazard?

- A) It refers to the private, self-interested actions that people pursue, which when taken collectively leads to a loss in economic surplus.
- B) It refers to the actions people take after they have entered into a transaction that makes the other party to the transaction worse off.
- C) It refers to the situation in which one party to a transaction takes advantage of knowing more than the other party to the transaction.
- D) It refers to the actions people take before they enter into a transaction so as to mislead the other party to the transaction.

Answer: B

Diff: 2 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

21) Automobile insurance companies have a problem with people who buy insurance and then drive recklessly or take less care to avoid losses after being insured. In other words, the automobile insurance market is subject to

- A) asymmetric information.
- B) market signaling.
- C) moral hazard.
- D) adverse selection.

Answer: C

Diff: 2 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

22) If a fire insurance company requires firms buying fire insurance to install automatic sprinkler systems, the insurance company is trying to reduce

- A) the problem of adverse selection.
- B) the moral hazard problem.
- C) sunk costs.
- D) asymmetric information.

Answer: B

Diff: 2 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

23) Health insurance companies impose deductibles on policies and co-payments on claims

- A) to increase sales.
- B) to reduce moral hazard problems.
- C) to reduce sunk costs.
- D) to increase prices.

Answer: B

Diff: 2 Page Ref: 215-216

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

24) In markets with asymmetric information

- A) moral hazard causes adverse selection which in turn causes asymmetric information.
- B) adverse selection causes moral hazard which in turn causes asymmetric information.
- C) asymmetric information causes moral hazard and then it causes adverse selection.
- D) asymmetric information causes adverse selection and then it causes moral hazard.

Answer: D

Diff: 2 Page Ref: 215

Topic: Adverse Selection and Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

25) What is the principal-agent problem?

- A) It is a problem caused by a person (principal) who hires an agent to act on his behalf but is unwilling to delegate authority to the agent to carry out the task in the best possible way.
- B) It is a problem caused by agents pursuing their own interests rather than the interests of the principals who hired them.
- C) It is a problem of the power system of boss and subordinate where the boss (principal) exerts influence over his subordinates (agents) using punishment or threat.
- D) It is a problem that exists when a person (principal) has more information about the task than the agent he hires to perform the task.

Answer: B

Diff: 2 Page Ref: 215

Topic: Principal-Agent Problem

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

26) In the principal-agent relationship, the agent is

- A) the owner of a resource that has hired another party to act on his behalf.
- B) the person who is placed in control over resources that are not his own, with a contractual obligation to use these resources in the interests of some other party.
- C) the person who is placed in control over resources that are not his own and agrees to compensate the resource owner in the event of outcomes that do not satisfy the resource owner.
- D) the person who places his resources in professional hands in exchange for the professional's promise to act on the resource owner's behalf.

Answer: B

Diff: 3 Page Ref: 215

Topic: Principal-Agent Problem

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 27) If a doctor knows that an insurance company will pay for most of a patient's bill, the doctor has more of an incentive to require additional medical procedures and tests, even if the patient may not require them. This is an example of

A) moral hazard. B) the principle-agent problem.  
C) asymmetric information. D) adverse selection.

Answer: B

Diff: 2 Page Ref: 215

Topic: Principal-Agent Problem

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 28) Suppose a large firm allows its employees to choose whether to participate in its health insurance plan. The firm is trying to decide between two plans: Plan I has a low monthly premium but a high deductible, and Plan II has a high monthly premium but a low deductible. Under which plan is adverse selection likely to be a bigger problem?

A) Plan I because it is likely to draw participants who expect high medical costs. This group expects to consume much health care services and therefore prefer low deductibles.  
B) Plan II because it is likely to draw participants who expect high medical costs. Healthy individuals who do not expect to consume much health care services will not be willing to pay the high premiums.  
C) Plan I because it is likely to draw the relatively healthy employees who do not expect to spend much on health care. Because the monthly premiums are low, the insurance company has to bear a bigger financial burden in the event of serious illnesses.  
D) Plan II because it is likely to draw employees who tend to over-consume health care services because of the low deductible. Insurance companies are likely to end up paying out more claims than the premiums they collect.

Answer: B

Diff: 3 Page Ref: 214–215

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

Figure 7-1

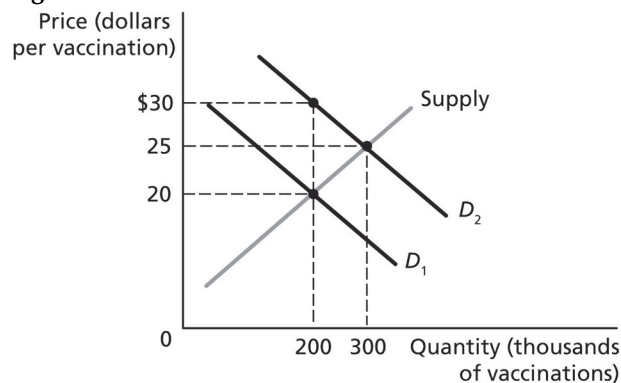


Figure 7-1 represents the market for vaccinations. Vaccinations are considered a benefit to society, and the figure shows both the marginal private benefit and the marginal social benefit from vaccinations.

- 29) Refer to Figure 7-1. Marginal private benefit is represented by which curve?

A) D<sub>1</sub>

- B)  $D_2$
- C) Supply
- D) All of the above represent marginal private benefit.

Answer: A

Diff: 2 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

30) **Refer to Figure 7-1.** Marginal social benefit is represented by which curve?

- A)  $D_1$
- B)  $D_2$
- C) Supply
- D) All of the above represent marginal social benefit.

Answer: B

Diff: 2 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

31) **Refer to Figure 7-1.** The market equilibrium price is

- A) \$30.
- B) \$25.
- C) \$20.
- D) <\$20.

Answer: C

Diff: 2 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

32) **Refer to Figure 7-1.** The market equilibrium quantity is \_\_\_\_\_ thousand vaccinations.

- A) 100
- B) 200
- C) 300
- D) >300

Answer: B

Diff: 2 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

33) **Refer to Figure 7-1.** The efficient equilibrium price is

- A) \$30.
- B) \$25.
- C) \$20.
- D) <\$20.

Answer: B

Diff: 2 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 34) **Refer to Figure 7-1.** The efficient equilibrium quantity is \_\_\_\_\_ thousand vaccinations.  
 A) 100                                      B) 200                                      C) 300                                      D) >300

Answer: C

Diff: 2      Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 35) **Refer to Figure 7-1.** At the efficient equilibrium  
 A) economic surplus is maximized.                                      B) economic surplus is minimized.  
 C) economic surplus is zero.    D) economic surplus is negative.

Answer: A

Diff: 2      Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 36) **Refer to Figure 7-1.** At the market equilibrium  
 A) the marginal benefit is equal to the marginal cost.  
 B) the marginal benefit is greater than the marginal cost.  
 C) the marginal benefit is less than the marginal cost.  
 D) the marginal benefit is zero.

Answer: B

Diff: 2      Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 37) **Refer to Figure 7-1.** At the market equilibrium, the deadweight loss is equal to  
 A) \$0.                                      B) \$250,000.                                      C) \$500,000.                                      D) \$1,000,000.

Answer: C

Diff: 2      Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 38) Because of the positive externality of vaccinations, economic efficiency would be improved  
 A) if fewer people were vaccinated.                                      B) if more people were vaccinated.  
 C) only if all people were vaccinated.                                      D) only if no people were vaccinated.

Answer: B

Diff: 2      Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking



- 39) Vaccinating people against a communicable disease such as influenza not only reduces the chances that the person vaccinated will catch the disease but also reduces the probability that an epidemic of the disease will occur. Which of the following statements is *true*?
- A) Reducing the chances that the person vaccinated will catch the disease is a private cost while reducing the probability of an influenza epidemic is a social benefit.
  - B) Vaccinating people against communicable diseases yields private benefits in excess of social benefits.
  - C) Reducing the chances that the person vaccinated will catch the disease is a private benefit while reducing the probability of an influenza epidemic is a social benefit.
  - D) The benefits of the influenza vaccination outweigh the costs.

Answer: C

Diff: 2 Page Ref: 219–220

Topic: Health Care

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 40) In the United States, the bulk of health care spending is paid by health insurance companies. Such a system is also called a third-party payer system where consumers of health care pay a nominal fee and the rest are paid by the health insurance provider. Why might such a system lead to an inefficient outcome?
- A) Health insurance companies have an incentive to control cost and therefore tend to deny consumers many cutting edge medical treatments.
  - B) Consumers have an incentive to over-consume health care services because they pay prices well below the cost of providing these services.
  - C) Physicians concerned that insurance companies may not approve payments tend not to order expensive tests for their patients.
  - D) Consumers fearing that excessive use of health care services may lead to a rise in insurance premiums tend to under-consume health care services.

Answer: B

Diff: 2 Page Ref: 219–220

Topic: Health Care

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 41) How do current tax laws in the United States favor employer-based health care insurance?
- A) Individuals who receive health insurance benefits are allowed to deduct the value of these benefits from their taxable income.
  - B) Employers who provide health insurance benefits are reimbursed by the government and are not taxed on these reimbursements.
  - C) Individuals who receive health insurance benefits do not pay taxes on the value of these benefits.
  - D) Health insurance companies that provide insurance to employers are subject to a lower tax rate than those insurance companies that provide insurance to private individuals.

Answer: C

Diff: 2 Page Ref: 219–220

Topic: Health Care

Learning Outcome: Micro–23: Discuss the economics of public goods and common resources.

AACSB: Analytic thinking

- 42) One effect of adverse selection in a market is that the equilibrium quantity of the product may be smaller than it would have been if there were no information problems.

Answer: TRUE

Diff: 2 Page Ref: 213

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 43) Due to adverse selection, very few lemons will be sold in the market for used cars.

Answer: FALSE

Diff: 1 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 44) The situation in which one party to a transaction takes advantage of knowing more than the other party to the transaction is known as asymmetric information.

Answer: FALSE

Diff: 2 Page Ref: 213

Topic: Asymmetric Information

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 45) If a state requires all drivers to buy health insurance, the problem of adverse selection is eliminated.

Answer: TRUE

Diff: 1 Page Ref: 214

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 46) Adverse selection is a situation in which one party to a transaction takes advantage of knowing more than the other party to the transaction.

Answer: TRUE

Diff: 1 Page Ref: 213

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 47) A doctor pursuing his own interests rather than the interests of his patients is an example of the principal-agent problem.

Answer: TRUE

Diff: 1 Page Ref: 215

Topic: Principal-Agent Problem

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 48) Moral hazard refers to the actions people take after they have entered into a transaction that make the other party to the transaction worse off.

Answer: TRUE

Diff: 1 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 49) Vaccinations tend to result in a positive externality.

Answer: TRUE

Diff: 1 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 50) College education tends to result in a negative externality because the recipient does not receive the full benefit of the education.

Answer: FALSE

Diff: 1 Page Ref: 217

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 51) In a market with positive externalities, the market equilibrium price will be less than the efficient equilibrium price.

Answer: TRUE

Diff: 1 Page Ref: 218

Topic: Positive Externality

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 52) Health insurance companies impose deductibles on policies and co-payments on claims to reduce the problem of adverse selection.

Answer: FALSE

Diff: 1 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

- 53) What is adverse selection?

Answer: Adverse selection refers to a situation where one party to a transaction takes advantage of the fact that she has more information than the other party to the transaction.

Diff: 1 Page Ref: 213

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

54) What is the principle-agent problem?

Answer: The principle-agent problem is a problem caused by agents pursuing their own interests rather than the interests of the principles who hired them.

Diff: 1 Page Ref: 215

Topic: Principal-Agent Problem

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

55) Suppose you see a 2006 Scion xB Sport Wagon advertised in the local newspaper for \$8,500. If you knew the car was reliable, you would be willing to pay \$10,000 for it. If you knew the car was unreliable, you would only be willing to pay \$5,500 for it. Under what circumstances should you buy the car?

Answer: Because of the lemons problem you should buy the car only if the advertisement is placed by a car dealer with a good reputation or by an individual you know well enough to trust, if you can cheaply determine that it isn't a lemon (for example, by an inspection), or if you'll receive a solid warranty against defects.

Diff: 2 Page Ref: 213

Topic: The Market for Lemons

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

56) What is moral hazard?

Answer: Moral hazard is a tendency for people to act in risky and reckless ways if they know that others will bear the burden of most or all of any bad consequences.

Diff: 2 Page Ref: 214

Topic: Moral Hazard

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

57) Why might a young, healthy person choose not to buy health insurance?

Answer: if you are healthy and rarely visit the doctor or buy prescription medicines, you are likely to pay more in premiums than you receive back in benefits.

Diff: 2 Page Ref: 216–217

Topic: Adverse Selection

Learning Outcome: Micro-21: Describe methods for countering and avoiding risk.

AACSB: Analytic thinking

58) What is an externality? Explain how someone receiving a meningitis vaccination is an example of an externality in the market for health care.

Answer: An externality is a benefit or cost that affects someone who is not directly involved in the production or consumption of a good or service. Someone who receives a meningitis vaccination is protecting not just himself or herself from the disease, but also reduces the chances that people who have not been vaccinated will contract the disease. In this case, receiving the vaccination provides a positive externality.

Diff: 2 Page Ref: 217

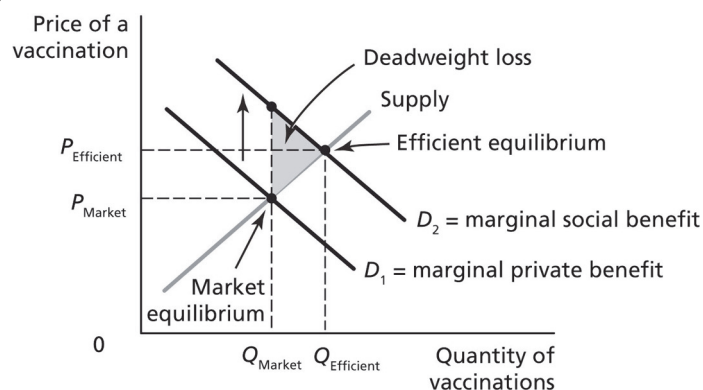
Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 59) Vaccinations tend to result in a positive externality. Draw a graph showing the market for vaccinations, including both the marginal private benefit curve and the marginal social benefit curve. Identify the market equilibrium price and quantity, the efficient equilibrium price and quantity, and the deadweight loss.

Answer:



Diff: 2 Page Ref: 218

Topic: Externalities

Learning Outcome: Micro-22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

## 7.4 The Debate Over Health Care Policy in the United States

- 1) By the year 2019, health care's share of gross domestic product in the United States is projected to
- A) return to its 1995 level.
  - B) have declined to only 6.5 percent.
  - C) be more than three times as high as it was in 1965.
  - D) reach a level of 75 percent.

Answer: C

Diff: 1 Page Ref: 220

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 2) In the United States, total health care spending per person has been \_\_\_\_\_, and out-of-pocket spending on health care per person has been \_\_\_\_\_.
- A) rising; rising
  - B) rising; falling
  - C) falling; rising
  - D) falling; falling

Answer: B

Diff: 1 Page Ref: 221

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 3) Compared to other high-income countries, health care spending per person in the United States has been
- A) growing at a faster rate.
  - B) declining at a faster rate.
  - C) growing at approximately the same rate.
  - D) declining at approximately the same rate.

Answer: A

Diff: 1 Page Ref: 221

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 4) In the United States, out-of-pocket spending on health care as a percentage of all spending on health care has \_\_\_\_\_ since 1960.

A) slowly risen  
B) steadily declined  
C) more than doubled  
D) remained stable

Answer: B

Diff: 1 Page Ref: 221

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 5) In the United States, out-of-pocket spending on health care was \_\_\_\_\_ percent of all health care spending in 2011.

A) 2  
B) 11  
C) 33  
D) 51

Answer: B

Diff: 1 Page Ref: 221

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 6) Based on the current rate of growth, health care spending as a percentage of GDP through Medicare, Medicaid, and other U.S. government programs is expected to

A) stabilize within the next 20 years.  
B) account for a majority of spending as a percentage of GDP within 5 years.  
C) slow down during this decade.  
D) more than double over the next 40 years.

Answer: D

Diff: 1 Page Ref: 222

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 7) The Congressional Budget Office estimates that the payments to settle malpractice lawsuits and the premiums doctors pay for malpractice insurance account for \_\_\_\_\_ of health care costs in the United States.

A) between 20 and 30 percent  
B) roughly half  
C) less than 1 percent  
D) a vast majority

Answer: C

Diff: 1 Page Ref: 223

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 8) Uninsured patients receiving treatments at hospital emergency rooms that could have been provided less expensively at doctor's offices account for \_\_\_\_\_ of health care costs in the United States.

A) between 1 and 4 percent  
 B) approximately 25 percent  
 C) almost 40 percent  
 D) between 15 and 20 percent

Answer: A

Diff: 1 Page Ref: 223

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 9) Growth in labor productivity in health care has been \_\_\_\_\_ labor productivity in the economy as a whole.

A) approximately equal to  
 B) slightly faster than  
 C) almost twice as fast as  
 D) less than half as fast as

Answer: D

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 10) Of the following, which has most likely contributed the most to the rapid rise in health care costs in the United States?

A) the cost of malpractice insurance  
 B) the cost to treat uninsured patients  
 C) slow growth in labor productivity in health care  
 D) the cost of malpractice lawsuit settlements

Answer: C

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 11) The aging of the U.S. population has tended to \_\_\_\_\_ spending on health care, and the development of new drugs and medical equipment has tended to \_\_\_\_\_ spending on health care.

A) increase; increase  
 B) increase; decrease  
 C) decrease; increase  
 D) decrease; decrease

Answer: A

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 12) In the United States, health care spending on people over age 65 is \_\_\_\_\_ on people aged 18 to 24.

A) one third as much as  
B) twice as much as  
C) six times greater than  
D) forty times greater than

Answer: C

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 13) The number of people receiving Medicare is expected to \_\_\_\_\_ by the year 2030.

A) reach 5 million by  
B) stabilize  
C) decline by 10 percent  
D) grow to 80 million

Answer: D

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

- 14) The Congressional Budget Office estimates that most of the increase in federal spending on Medicare and Medicaid will be due to

A) the aging population.  
B) increases in the cost of providing health care.  
C) increases in immigration.  
D) declining income levels.

Answer: B

Diff: 1 Page Ref: 224

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 15) In the United States, consumers usually pay \_\_\_\_\_ than the true cost of medical treatment because of \_\_\_\_\_.

A) more; adverse selection  
B) more; rising insurance premiums  
C) less; third-party payers  
D) less; rising insurance deductibles

Answer: C

Diff: 1 Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 16) Because consumers who have insurance provided by their employers usually only pay a deductible for a visit to the doctor's office

A) they demand a larger quantity of health care services than they would if they paid a price that better represented the true cost of providing the service.  
B) they demand a smaller quantity of health care services than they would if they paid a price that better represented the true cost of providing the service.  
C) the doctors supply a smaller quantity of health care services than they would if the consumer paid a price that better represented the true cost of providing the service.  
D) the insurance companies provide a larger quantity of health care services than they would if the consumer paid a price that better represented the true cost of providing the service.

Answer: A



Diff: 2 Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 17) Because consumers who have insurance provided by their employers usually only pay a deductible for a visit to the doctor's office
- A) employers have more incentive to allow employees time off for doctor visits.
  - B) doctors have less incentive to control their costs.
  - C) insurance companies have more incentive to approve medical procedures for their policy holders.
  - D) consumers have less incentive to visit the doctor's office on a more frequent basis.

Answer: B

Diff: 2 Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

Figure 7-2

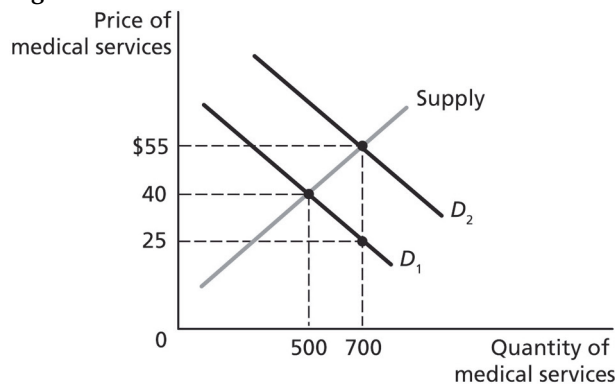


Figure 7-2 represents the market for medical services with and without insurance, and the effect of a third-party payer system on the demand for medical services.

- 18) Refer to Figure 7-2. If consumers paid the full price of medical services, the price they would pay is
- A) \$25.
  - B) \$40.
  - C) \$55.
  - D) >\$55.

Answer: B

Diff: 2 Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) **Refer to Figure 7-2.** If consumers paid the full price of medical services, the equilibrium quantity would be

A) 200.                      B) 500.                      C) 700.                      D) >700.

Answer: B

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 20) **Refer to Figure 7-2.** With insurance and a third-party payer system, what price do doctors receive for medical services?

A) \$25                      B) \$40                      C) \$55                      D) >\$55

Answer: C

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 21) **Refer to Figure 7-2.** With insurance and a third-party payer system, what price do consumers pay for medical services?

A) \$25                      B) \$40                      C) \$55                      D) >\$55

Answer: A

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 22) **Refer to Figure 7-2.** With insurance and a third-party payer system, the equilibrium quantity of medical services is

A) 200.                      B) 500.                      C) 700.                      D) >700.

Answer: C

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 23) **Refer to Figure 7-2.** The efficient price of medical services is

A) \$25.                      B) \$40.                      C) \$55.                      D) >\$55.

Answer: B

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 24) **Refer to Figure 7-2.** The efficient quantity of medical services is

A) 200.                      B) 500.                      C) 700.                      D) >700.

Answer: B

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 25) **Refer to Figure 7-2.** With insurance and a third-party payer system, what is the amount of the deadweight loss?

A) \$0                                      B) \$1,500                                      C) \$3,000                                      D) \$9,500

Answer: C

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 26) When consumers pay only a fraction of the true cost of medical services, their demand increases. The marginal cost of producing these extra services

A) is greater than the marginal benefit consumers receive from them.  
 B) is less than the marginal benefit consumers receive from them.  
 C) is equal to the marginal benefit consumers receive from them.  
 D) is zero due to the insurance payments.

Answer: A

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 27) In addition to covering the costs of unpredictable events, health insurance typically covers many planned expenses, such as routine checkups, annual physicals, and the cost of vaccinations. because of this, health insurance

A) discourages overuse of health care services.  
 B) encourages overuse of health care services.  
 C) generates an efficient quantity of health care services.  
 D) is not accepted by most doctors and hospitals.

Answer: B

Diff: 2      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 28) Of the following U.S. presidents, which was the first to propose a national health insurance program to Congress?

A) Barack Obama                                      B) Bill Clinton  
 C) John F. Kennedy                                      D) Harry Truman

Answer: D

Diff: 1      Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 29) All of the following are part of the "individual mandate" provision of the Patient Protection and Affordable Care Act (ACA) *except*
- A) individuals are allowed to opt out of the insurance program if they can prove they have no serious health issues and do so before the act fully takes effect in the year 2014.
  - B) by 2016, fines for not having health insurance will be the greater of \$695 per person or 2.5 percent of income.
  - C) beginning in 2014, individuals who do not acquire health insurance will be subject to a fine.
  - D) with limited exceptions, every resident of the United States will be required to have health insurance that meets certain basic requirements.

Answer: A

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 30) All of the following are part of the "state health exchanges" provision of the Patient Protection and Affordable Care Act (ACA) *except*
- A) each state is required to establish an Affordable Insurance Exchange by 2014.
  - B) small businesses with fewer than 50 employees will be exempt from being required to participate in the program.
  - C) low-income individuals will be eligible for tax credits to offset the costs of buying health insurance.
  - D) health insurance policies that meet certain specified requirements will be offered by state-run agencies, by non-profit firms, or by the federal government.

Answer: B

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 31) Which of the following is a part of the "employer mandate" provision of the Patient Protection and Affordable Care Act (ACA)?
- A) Every firm with more than 3 full-time employees must offer health insurance to its employees and must automatically enroll them in the plan.
  - B) small businesses with fewer than 50 employees will be exempt from being required to participate in the program.
  - C) Firms with more than 50 full-time employees must offer health insurance or pay a \$3,000 fine to the federal government for every employee who receives a tax credit from the federal government for obtaining health insurance through a health exchange.
  - D) Every resident of the United States must have health insurance that meets certain basic requirements.

Answer: C

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 32) For many small firms, providing health insurance for their workers
- A) has decreased in cost over the past 10 years.
  - B) represents their most rapidly increasing cost.
  - C) costs virtually nothing under the ACA.
  - D) encourages them to hire more full-time workers.

Answer: B

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 33) All of the following are part of the "regulation of health insurance" provision of the Patient Protection and Affordable Care Act (ACA) *except*
- A) individuals with pre-existing medical conditions will be able to acquire health insurance.
  - B) all policies must provide coverage for dependant children up to age 26.
  - C) lifetime dollar maximums on coverage will be prohibited.
  - D) limits on the size of deductibles and on waiting periods before coverage takes effect will be eliminated.

Answer: D

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 34) All of the following are part of the "taxes" provision of the Patient Protection and Affordable Care Act (ACA) *except*
- A) pharmaceutical firms and health insurance firms will pay new taxes.
  - B) investors earning more than \$200,000 will pay a new tax on their investment income.
  - C) beginning in 2018, all taxes on employer-provided health insurance plans will be reduced or eliminated.
  - D) workers earning more than \$200,000 will have their share of the Medicare payroll tax increase.

Answer: C

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 35) The Congressional Budget Office estimates that the Patient Protection and Affordable Care Act (ACA) will
- A) increase government spending by just under \$1 trillion over 10 years.
  - B) cost the government significantly more than the additional taxes and fees enacted under the law will bring in.
  - C) eliminate the budget deficit within 10 years.
  - D) actually reduce government spending over a 20 year period.

Answer: A

Diff: 1 Page Ref: 227

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 36) The Patient Protection and Affordable Care Act (ACA) is scheduled to be fully implemented by 2019, at which point

- A) current budget cuts are expected to have completely offset the cost of the program.
- B) more than 30 million additional individuals are expected to have health care coverage.
- C) all hospitals in the United States will be taken over by the federal government.
- D) private health insurance companies will no longer exist in the United States.

Answer: B

Diff: 1 Page Ref: 227

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 37) Some economists and policymakers who are in favor of government-provided health care believe that providing health care will generate

- A) additional moral hazard.
- B) positive externalities.
- C) greater asymmetric information.
- D) more adverse selection.

Answer: B

Diff: 1 Page Ref: 227

Topic: Externalities

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 38) Economists who support market-based reforms for health care believe that increased competition among providers of health care would \_\_\_\_\_ costs and \_\_\_\_\_ economic efficiency.

- A) increase; increase
- B) increase; decrease
- C) decrease; increase
- D) decrease; decrease

Answer: C

Diff: 2 Page Ref: 227

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 39) A goal of market-based reforms of the health care system is to give patients an incentive to pay more attention to the prices of medical services. This would tend to \_\_\_\_\_ economic efficiency by \_\_\_\_\_ the costs of medical services

- A) increase; increasing
- B) increase; decreasing
- C) decrease; increasing
- D) decrease; decreasing

Answer: B

Diff: 2 Page Ref: 227-228

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 40) Most employees \_\_\_\_\_ pay taxes on the value of health insurance provided by employers, and most people \_\_\_\_\_ get a tax break when buying individual health insurance policies.  
 A) do; do                      B) do; do not                      C) do not; do                      D) do not; do not

Answer: D

Diff: 1      Page Ref: 228–229

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 41) Some economists have proposed making the tax treatment of employer–provided health insurance the same as the tax treatment of individually purchased health insurance and out-of-pocket health care spending. Such changes would make it more likely that  
 A) consumers would pay prices closer to the actual costs for routine medical care.  
 B) employers would provide more generous medical coverage to their employees.  
 C) insurance deductibles would decrease.  
 D) the quantity of medical services demanded would increase.

Answer: A

Diff: 2      Page Ref: 228–229

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 42) Economists John Cogan, Glenn Hubbard, and Daniel Kessler have estimated that repealing the tax preference for employer–provided health insurance would  
 A) significantly reduce the effectiveness of the health care received by those enrolled in these programs.  
 B) increase overall spending on health care as consumers would have to pay a higher price for medical services.  
 C) drive up prices for health care coverage since insurance reimbursements to doctors would be reduced.  
 D) reduce spending by people enrolled in these programs by 33 percent.

Answer: D

Diff: 1      Page Ref: 229

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 43) Which of the following reforms could potentially reduce spending on health care without reducing the effectiveness of health care received?  
 A) nationalize health care so that all health services are government funded and operated  
 B) give every citizen a fixed amount of money that can only be spent on health care services  
 C) reimburse consumers for preventive health care expenditures so as to avoid costly emergency medical treatments in the future  
 D) standardize the tax treatment of employer–based health insurance benefits and private spending on health care

Answer: D

Diff: 2      Page Ref: 229

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

## Article Summary

Administrative overhead costs resulting from insurance companies handling reimbursement claims is in large part the reason that health care in the United States is much more expensive than in other countries. An analysis on the administration costs of health care in the United States found that roughly 30 percent of the costs of health care are administrative and that more than 25 percent of health-sector employees work in administration. Health insurance companies are often paid a fixed percentage of the claims they administer, which gives them little to no impetus to increase efficiency and keep costs down.

**Source:** Jeffrey Pfeffer, "The Reason Health Care Is So Expensive: Insurance Companies," *Bloomberg Businessweek*, April 10, 2013.

- 44) **Refer to the Article Summary.** Even if insurance companies were more efficient and brought administrative costs down, consumers would still pay less than the full cost of medical treatment. This would result in the market equilibrium price of medical services being \_\_\_\_\_ than the efficient equilibrium price, and the market equilibrium quantity of medical services being \_\_\_\_\_ than the efficient equilibrium quantity.
- A) greater; greater  
B) greater; less  
C) less; greater  
D) less; less

Answer: A

Diff: 2      Page Ref: 227

Topic: Health Care

*Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.*

AACSB: Analytic thinking

- 45) Basic supply and demand analysis indicates that having firms rather than the government provide health insurance to workers
- A) changes both the composition of the compensation that firms pay and its level.
  - B) changes the composition of the compensation that firms pay, but does not change its level.
  - C) does not change the composition of the compensation that firms pay, but does change its level.
  - D) changes neither the composition of the compensation that firms pay nor its level.

Answer: B

Diff: 2      Page Ref: 228-229

Topic: Health Care

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

AACSB: Analytic thinking

- 46) In 2012, employees covered by company-provided health insurance paid \_\_\_\_\_ percent of the cost of their own health insurance.
- A) 3                      B) 18                      C) 37                      D) 65

Answer: B

Diff: 1      Page Ref: 229

Topic: Health Care

*Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.*



- 47) The rising cost of malpractice insurance is one of the leading causes of the increase in health care spending as a percentage of GDP in the United States.

Answer: FALSE

Diff: 1 Page Ref: 223

Topic: Health Care

Learning Outcome: Micro-1: Identify the basic principles of economics and explain how to think like an economist.

AACSB: Analytic thinking

- 48) "Cost disease" refers to the tendency for low productivity in the service sector to lead to higher costs in those industries.

Answer: TRUE

Diff: 1 Page Ref: 223

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 49) Under the Patient Protection and Affordable Care Act (ACA), residents who do not have health insurance will not be allowed to seek employment.

Answer: FALSE

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 50) Under the Patient Protection and Affordable Care Act (ACA), insurance companies will be required to participate in a high-risk pool that will cover individuals with pre-existing medical conditions.

Answer: TRUE

Diff: 1 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 51) Those who favor changes in the market for health care that would make it more like the markets for other goods and services are generally in favor of universal health care coverage.

Answer: FALSE

Diff: 1 Page Ref: 227

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 52) In most circumstances, employees do not pay taxes on the value of health insurance their employers provide them.

Answer: TRUE

Diff: 1 Page Ref: 228-229

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 53) If consumers paid the full price of medical services instead of using health insurance and third-party payers to cover part of the cost, the quantity of medical services provided would increase.

Answer: FALSE

Diff: 1 Page Ref: 228–229

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 54) The Congressional Budget Office estimates that the additional taxes and fees enacted under the ACA will be enough to pay for the plan *and* reduce the federal government's budget deficit.

Answer: TRUE

Diff: 1 Page Ref: 227

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 55) Since 1960, out-of-pocket spending on health care has increased sharply as a fraction of all health care spending.

Answer: FALSE

Diff: 1 Page Ref: 228

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 56) By 2013, spending on federal health care programs such as Medicare and Medicaid had grown to 6 percent of GDP.

Answer: TRUE

Diff: 1 Page Ref: 228

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 57) What has happened to health care's share of gross domestic product in the United States since 1965? How does this compare to what has happened to out-of-pocket spending on health care as a percentage of all spending on health care?

Answer: Health care's share of gross domestic product in the United States has increased from less than 6 percent in 1965 to about 17.3 percent in 2013, and is projected to increase to approximately 19.6 percent in 2019. Out-of-pocket spending on health care as a percentage of all spending on health care has steadily declined, falling from 48 percent in 1960 to 11 percent in 2011.

Diff: 2 Page Ref: 220–221

Topic: Health Care

Learning Outcome: Micro–19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

58) Briefly describe the 6 main provisions of the Patient Protection and Affordable Care Act (ACA)?

- Answer:
1. Individual mandate requiring that every resident of the United States have health insurance or be subject to a fine.
  2. State health exchanges which offer health insurance policies are required to be established in every state.
  3. Employers are mandated to offer health insurance to employees, or in some cases, pay a fee to the federal government for every employee who receives a tax credit for obtaining insurance through a health exchange.
  4. Insurance companies will be required to participate in a high-risk pool and must provide health coverage for dependant children up to age 26. Also, lifetime dollar maximums will be prohibited and limits will be placed on deductibles and waiting periods for coverage to take effect.
  5. Medicare eligibility will be expanded and some Medicare reimbursements will be reduced.
  6. New taxes will be phased in to help fund the program.

Diff: 2 Page Ref: 226

Topic: Health Care

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

59) Which of the following factors help to explain the sustained increases in health care spending in the United States, and which do not?

- a. the additional paperwork, duplication, and waste generated in the U.S. health care system compared to systems in other countries
- b. the increasing costs of malpractice insurance and malpractice lawsuit settlements
- c. the number of uninsured patients receiving hospital treatment that could have been preformed at a lower cost in doctors' offices
- d. the slow growth in labor productivity in health care compared to that in the economy as a whole
- e. the aging population
- f. increases in the cost of providing health care

Answer: Factors "d," "e," and "f" do help explain the sustained increases in health care spending in the United States.

Factors "a," "b," and "c" do not explain the sustained increases in health care spending in the United States.

Diff: 2 Page Ref: 223-225

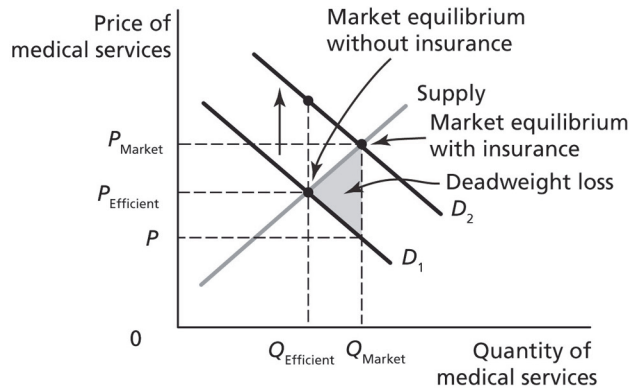
Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 60) Suppose consumers pay less than the true cost of medical services because a third party, such as an insurance company, pays most of the bill. Draw a graph showing the supply and demand for medical services with and without a third-party payer. Identify the market equilibrium without insurance, the market equilibrium with insurance, and the area representing the deadweight loss. Be sure to label the efficient and the market prices and quantities.

Answer:



Diff: 2 Page Ref: 225

Topic: Health Care

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

# Chapter 8

## Firms, the Stock Market, and Corporate Governance

### 8.1 Types of Firms

- 1) Which of the following must a firm in a market economy do today to succeed?
- A) Produce the goods and services that consumers want at a lower cost than consumers themselves can produce.
  - B) Organize the factors of production into a functioning, efficient unit.
  - C) Have access to sufficient funds.
  - D) Market firms today must do all of these things.

Answer: D

Diff: 1 Page Ref: 238

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 2) Organizing a successful firm in a market economy has become \_\_\_\_\_ over the last century.
- A) legally impossible
  - B) politically impossible
  - C) less difficult
  - D) more difficult

Answer: D

Diff: 1 Page Ref: 238

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 3) Unlike firms that sell stock in financial markets, which are known as \_\_\_\_\_ firms, companies which do not sell stock in financial markets are known as \_\_\_\_\_ firms.
- A) public; private
  - B) open; closed
  - C) corporate; proprietary
  - D) stock market; bond market

Answer: A

Diff: 1 Page Ref: 237

Topic: Corporations

Learning Outcome: Micro-18: Describe the fundamentals of capital markets and factors influencing the investment decision .

AACSB: Analytic thinking

- 4) A sole proprietorship is
- A) the easiest type of business to set up.
  - B) the most difficult type of business to set up.
  - C) the most expensive type of business to set up.
  - D) the least profitable type of business to set up.

Answer: A

Diff: 2 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 5) Which type of business is the most difficult to set up?
- A) sole proprietorship
  - B) partnership
  - C) corporation
  - D) There is no difference in the difficulty of establishment.

Answer: C

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 6) A corporation is the type of business has \_\_\_\_\_ government rules and regulations affecting it.
- A) no
  - B) the fewest
  - C) the most
  - D) only federal

Answer: C

Diff: 1 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 7) Which type of business has the least government rules and regulations affecting it?
- A) sole proprietorship
  - B) partnership
  - C) corporation
  - D) They all have the same set of rules and regulations affecting them.

Answer: A

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 8) As a form of business, a partnership
- A) has limited liability.
  - B) has only one owner.
  - C) cannot issue stock.
  - D) has the most government rules and regulations affecting it.

Answer: C

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 9) How do a sole proprietorship and a corporation differ?
- A) Proprietorships have unlimited liability while corporations have limited liability.
  - B) Corporations can issue stocks and bonds, while proprietorships cannot.
  - C) Corporations face more taxes than do proprietorships.
  - D) All of these are differences between the two types of businesses.

Answer: D

Diff: 1 Page Ref: 239

Topic: Types of Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 10) Assume you set up a sole proprietorship and your lawyer tells you that as the owner, you could stand to lose your personal wealth if the business goes bankrupt. This means a sole proprietorship
- A) faces limited liability.
  - B) faces unlimited liability.
  - C) has little chance of succeeding.
  - D) is not a good type of business to set up.

Answer: B

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 11) Who controls a sole proprietorship?
- A) stockholders
  - B) bondholders
  - C) the owner
  - D) all of these

Answer: C

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 12) A corporation is owned by its
- A) board of directors.
  - B) stockholders.
  - C) employees.
  - D) CEO.

Answer: B

Diff: 1 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 13) How does the owner of a sole proprietorship relate to the business?
- A) The owner and the business are separate legal entities.
  - B) The owner and the business are not separate legal entities.
  - C) The assets of the owner are considered separate from the asset of the business.
  - D) None of these describe the legal relationship of the owner to the business.

Answer: B

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 14) In a typical year, \_\_\_\_\_ of new jobs are created by small firms.
- A) less than 5 percent
  - B) 10 percent
  - C) 40 percent
  - D) 75 percent

Answer: C

Diff: 2 Page Ref: 240–241

Topic: Firms

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 15) Eighty-five percent of all firms employ \_\_\_\_\_ workers.
- A) only one or two
  - B) fewer than 20
  - C) 50 or more
  - D) over 100

Answer: B

Diff: 1 Page Ref: 240–241

Topic: Firms

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 16) The owners of a \_\_\_\_\_ have a separate legal distinction from the business.
- A) corporation
  - B) partnership
  - C) sole proprietorship
  - D) All of the above are correct.

Answer: A

Diff: 2 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 17) What does limited liability mean?
- A) The owners of the business are personally responsible for paying expenses incurred by the business.
  - B) Only employees can have a claim on the assets of the business.
  - C) The personal assets of the owners cannot be claimed if the business is bankrupt.
  - D) Anybody with a liability against a firm can claim only what their liability refers to.

Answer: C

Diff: 1 Page Ref: 238

Topic: Liability

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 18) Which of the following is an advantage of starting a new business as a proprietorship?
- A) The owner has limited personal liability.
  - B) A proprietorship has few government rules and regulations to comply with.
  - C) Business profits are not taxed.
  - D) A proprietorship can easily attain additional funding.

Answer: B

Diff: 2 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking



- 19) Jeremy is thinking of starting up a small business selling NASCAR memorabilia. He is considering setting up his business as a sole proprietorship. What is one advantage to Jeremy of setting up his business as a sole proprietorship?
- A) As a sole proprietor, Jeremy would face limited liability.
  - B) As a sole proprietor, Jeremy would have the ability to share risk with shareholders.
  - C) As a sole proprietor, Jeremy would have both ownership and control over the business.
  - D) All of the above would be advantages of setting up his business as a sole proprietorship.

Answer: C

Diff: 2 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 20) Jeremy is thinking of starting up a small business selling NASCAR memorabilia. He is considering setting up his business as a sole proprietorship. What is one disadvantage to Jeremy of setting up his business as a sole proprietorship?
- A) As a sole proprietor, Jeremy would be taxed twice.
  - B) As a sole proprietor, Jeremy would not have control of the business.
  - C) As a sole proprietor, Jeremy would face unlimited liability.
  - D) As a sole proprietor, Jeremy would be subject to significant rules and regulations.

Answer: C

Diff: 2 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 21) Which of the following is *not* an advantage of starting a new business as a corporation?
- A) separation of ownership and business liability
  - B) enhanced ability to raise funds
  - C) ability to share risks
  - D) possibility of double taxation

Answer: D

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 22) How are corporate profits taxed in the United States?
- A) Earnings are taxed first by state sales taxes and then as corporate profits at the Federal level.
  - B) Earnings are taxed first as personal income then as corporate profits at the Federal level.
  - C) Earnings are taxed first as corporate profits then as personal income after dividends are paid.
  - D) Corporate profits are not taxed at all.

Answer: C

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 23) Sole proprietorships are \_\_\_\_\_ type of business.
- A) the most profitable
  - B) the least common
  - C) the most common
  - D) the least risky

Answer: C

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 24) Which is the least common type of business?
- A) corporation
  - B) partnership
  - C) sole proprietorship
  - D) impossible to determine without further information

Answer: B

Diff: 2 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 25) As a business type, corporations \_\_\_\_\_ in the United States.
- A) earn the majority of revenues
  - B) are the most common
  - C) are the least common
  - D) are subject to the fewest taxes

Answer: A

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 26) Which type of businesses earns the majority of profits in the United States?
- A) corporations
  - B) partnerships
  - C) sole proprietorships
  - D) none of these

Answer: A

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 27) Who controls a partnership?
- A) the owners
  - B) stockholders
  - C) bondholders
  - D) employees

Answer: A

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 28) A firm in a market economy must do all of the following to succeed *except*
- A) produce the goods and services that consumers want at a lower cost than consumers themselves can produce.
  - B) organize the factors of production into a functioning, efficient unit.
  - C) have access to sufficient funds.
  - D) be organized as a corporation.

Answer: D

Diff: 1 Page Ref: 238

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 29) How has organizing a successful firm in a market economy changed over the last century?
- A) It has become easier as more and more firms discover how to do it.
  - B) As government intervention has decreased, firms now have more freedom.
  - C) There has been no change one way or the other over the last century.
  - D) It has become more difficult to organize an efficient and successful firm.

Answer: D

Diff: 1 Page Ref: 238

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 30) Before its IPO, Facebook was an example of a private firm. As a private firm, Facebook was
- A) not subject to government regulations and taxation.
  - B) run by stockholders and a board of directors.
  - C) run by its founder, Mark Zuckerberg.
  - D) not legally allowed to raise funds through venture capital firms.

Answer: C

Diff: 1 Page Ref: 237

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 31) What type of business is the easiest to set up?
- A) sole proprietorship
  - B) partnership
  - C) corporation
  - D) There is no difference in the ease of establishment.

Answer: A

Diff: 2 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 32) Anything of value owned by a person or a firm is  
A) an asset. B) a liability. C) wealth. D) owner's yield.

Answer: A

Diff: 1 Page Ref: 238

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 33) A corporation is  
A) the easiest type of business to set up.  
B) the least expensive type of business to set up.  
C) the most difficult type of business to set up.  
D) the least profitable type of business to set up.

Answer: C

Diff: 2 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 34) Which type of business has the most government rules and regulations affecting it?  
A) sole proprietorship  
B) partnership  
C) corporation  
D) They all have the same set of rules and regulations affecting them.

Answer: C

Diff: 1 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 35) Of the different types of businesses, a corporation has the \_\_\_\_\_ government rules and the \_\_\_\_\_ government regulations affecting it.  
A) least; least B) least; most C) most; least D) most; most

Answer: D

Diff: 1 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 36) What is the primary difference between a sole proprietorship and a partnership?  
A) Proprietorships have unlimited liability while partnerships have limited liability.  
B) Partnerships can issue stocks and bonds while proprietorships cannot.  
C) Partnerships have more owners than do proprietorships.  
D) There is no real difference between the two types of firms.

Answer: C

Diff: 1 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

37) Which of the following statements is *false*?

- A) Corporations can issue stocks and bonds, while proprietorships cannot.
- B) Corporations have one owner, while proprietorships have many owners.
- C) Corporations face more taxes than do proprietorships.
- D) Proprietorships have unlimited liability while corporations have limited liability.

Answer: B

Diff: 1 Page Ref: 238

Topic: Types of Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

38) Assume you set up a sole proprietorship and your lawyer tells you that as the owner you will face unlimited liability. What does that mean?

- A) You are liable for organizing the business.
- B) You could stand to lose your personal wealth if the business goes bankrupt.
- C) There is no legal responsibility of the business in case a customer sues, as the business is legally untouchable.
- D) None of these explain what unlimited liability means.

Answer: B

Diff: 1 Page Ref: 238

Topic: Liability

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

39) Who controls a partnership?

- A) stockholders
- B) bondholders
- C) the owners
- D) all of these

Answer: C

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

40) Who owns a corporation?

- A) the board of directors
- B) the stockholders
- C) the employees
- D) the CEO

Answer: B

Diff: 1 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 41) How do the owners of a partnership relate to the business?
- A) The owners and the business are not separate legal entities.
  - B) The owners and the business are separate legal entities.
  - C) The assets of the owners are considered separate from the asset of the business.
  - D) None of these describe the legal relationship of the owners to the business.

Answer: A

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 42) In a typical year, \_\_\_\_\_ new firms open in the United States.
- A) more than 600,000
  - B) more than 1 million
  - C) less than 200,000
  - D) approximately 125,000

Answer: A

Diff: 2 Page Ref: 240–241

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 43) On average, jobs at small firms pay \_\_\_\_\_ wages than jobs at large firms and are \_\_\_\_\_ likely to offer fringe benefits such as health insurance and retirement accounts.
- A) higher; more
  - B) lower; more
  - C) higher; less
  - D) lower; less

Answer: D

Diff: 1 Page Ref: 240–241

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 44) How does the owner of a corporation relate to the business?
- A) The owners of the business have a separate legal distinction from the business.
  - B) The owners of the business have no separate legal distinction from the business.
  - C) The personal assets are part of the corporation's assets.
  - D) None of these describe the legal relationship of corporate owners to the business.

Answer: A

Diff: 2 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 45) If the personal assets of the owners cannot be claimed if the business is bankrupt, the owners are said to have
- A) unlimited liability.
  - B) a proprietorship type of business.
  - C) limited liability.
  - D) a partnership type of business.

Answer: C

Diff: 1 Page Ref: 238

Topic: Liability

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 46) Which of the following is *not* an advantage of starting a new business as a proprietorship?
- A) The owner has complete control over the business.
  - B) A proprietorship has few government rules and regulations to comply with.
  - C) Business profits are only taxed once, not twice.
  - D) A proprietorship can easily attain additional funding.

Answer: D

Diff: 2 Page Ref: 238–239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 47) Jeremy is thinking of starting up a small business selling NASCAR memorabilia. He is considering setting up his business as a corporation. What is one advantage to Jeremy of setting up his business as a corporation?
- A) By setting up the business as a corporation, Jeremy would not face double taxation.
  - B) By setting up the business as a corporation, Jeremy would have the ability to share risk with shareholders.
  - C) By setting up the business as a corporation, Jeremy would have both ownership and control over the business.
  - D) All of the above would be advantages of setting up his business as a corporation.

Answer: B

Diff: 2 Page Ref: 238–239

Topic: Corporations

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 48) Jeremy is thinking of starting up a small business selling NASCAR memorabilia. He asks his friend, Carmen, if she'd like to join him in setting up a partnership to start the business. What is one disadvantage in joining the partnership that Carmen should consider?
- A) Carmen should realize that profits in the partnership will be reduced by dividend payments to shareholders.
  - B) Carmen should realize that, as an owner of the business, she will be personally responsible for the debts of the business.
  - C) Carmen should realize that the profits of the business will also be taxed as dividend income, so she faces the potential for double taxation of that business income.
  - D) Carmen should realize that the Jeremy will have complete control over the business because it was his idea.

Answer: B

Diff: 2 Page Ref: 238–239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 49) Which of the following is an advantage of starting a new business as a corporation?
- A) double taxation
  - B) ease in setting up
  - C) low expenses of legally organizing
  - D) greater ability to raise funds

Answer: D

Diff: 2 Page Ref: 238–239

Topic: Corporations

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 50) In the United States, corporate profits are taxed
- A) only at the corporate level.
  - B) only when investors receive dividends.
  - C) at both the corporate level and when investors receive dividends.
  - D) neither at the corporate level nor when investors receive dividends.

Answer: C

Diff: 2 Page Ref: 238–239

Topic: Corporations

Learning Outcome: Micro–24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

- 51) What is the most common type of business?
- A) corporation
  - B) partnership
  - C) sole proprietorship
  - D) They are equally represented because of federal laws.

Answer: C

Diff: 1 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 52) A partnership is \_\_\_\_\_ type of business.
- A) the most common
  - B) the least common
  - C) the least risky
  - D) the most profitable

Answer: B

Diff: 2 Page Ref: 239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 53) Which type of businesses earns the majority of revenues in the United States?
- A) corporations
  - B) partnerships
  - C) sole proprietorships
  - D) none of these

Answer: A

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking



- 54) As a business type, corporations \_\_\_\_\_ in the United States.
- A) earn the majority of profits  
B) are the most common  
C) are the least common  
D) are subject to the least amount of taxes

Answer: A

Diff: 2      Page Ref: 239

*Topic: Corporations*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 55) Who controls a sole proprietorship?
- A) owner                      B) stockholders                      C) bondholders                      D) employees

Answer: A

Diff: 1      Page Ref: 238

*Topic: Proprietorships and Partnerships*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 56) When a business is set up as a sole proprietorship, the owner of the business faces limited liability.

Answer: FALSE

Diff: 1      Page Ref: 238

Topic: *Proprietorships and Partnerships*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 57) The only type of business that faces limited liability is a corporation.

Answer: TRUE

Diff: 2      Page Ref: 238

*Topic: Liability*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 58) In the United States, corporate profits are taxed at the corporate level and then are taxed again as personal income in the form of dividend payments.

Answer: TRUE

Diff: 1      Page Ref: 239

Topic: Corporations

*Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.*

AACSB: Analytic thinking

- 59) When a business is set up as partnership, the owner of the business faces unlimited liability.

Answer: TRUE

Diff: 1      Page Ref: 238

Topic: *Proprietorships and Partnerships*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

60) The only type of business that faces unlimited liability is a sole proprietorship.

Answer: FALSE

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

61) In the United States, partnership profits are taxed at the business level and then are taxed again as personal income in the form of dividend payments.

Answer: FALSE

Diff: 1 Page Ref: 238–239

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

62) Define a partnership.

Answer: A partnership is a firm owned jointly by two or more persons and is not organized as a corporation.

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

63) How do unlimited and limited liability differ?

Answer: Unlimited liability means that if a firm is bankrupt, lenders can take the owner's personal wealth. Limited liability means that the owner can lose only what is invested in the firm.

Diff: 1 Page Ref: 238

Topic: Liability

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

64) What are the advantages of setting up a corporation as opposed to a proprietorship or partnership?

Answer: Corporations have limited liability and a greater ability to raise funds.

Diff: 2 Page Ref: 238–239

Topic: Types of Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

65) What type of business has the potential for double taxation of profits and why?

Answer: Corporations earn profits that are taxed at the corporate level and, after dividends are paid to stockholders, then are taxed as personal income.

Diff: 2 Page Ref: 239

Topic: Corporations

Learning Outcome: Micro-24: Explain the basic principles of tax policies and the tax system.

AACSB: Analytic thinking

66) Define a sole proprietorship.

Answer: A firm owned by one person.

Diff: 1 Page Ref: 238

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

67) Define a corporation.

Answer: A corporation is a legal form of business that provides owners with protection from losing more than their investment should the business fail.

Diff: 1 Page Ref: 238

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

68) What are the advantages of setting up a proprietorship or partnership as opposed to a corporation?

Answer: Ease of formation and owners have control.

Diff: 2 Page Ref: 238–239

Topic: Types of Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

69) In which types of business do owners have unlimited personal liability and in which do owners have limited personal liability?

Answer: Sole proprietorships and partnerships are subject to unlimited personal liability. Corporations are subject to limited personal liability.

Diff: 2 Page Ref: 238

Topic: Types of Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

## 8.2 The Structure of Corporations and the Principal-Agent Problem

1) What is an inside director?

- A) a movie director who also appears in the movie
- B) a member of a corporate board of directors that is also a manager of the business
- C) the CEO that is selected by the corporation's board of directors
- D) a board of director chair who has been in the job for at least three years

Answer: B

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 2) Corporate governance involves the way in which
- A) the government nationalizes corporations.
  - B) the government licenses corporations.
  - C) a corporation is subject to government regulations.
  - D) a corporation is structured.

Answer: D

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 3) Who operates and controls a corporation in its day-to-day activities?
- A) the board of directors
  - B) stockholders
  - C) employees
  - D) management

Answer: D

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 4) A corporation's board of directors
- A) hire the managers of the corporation.
  - B) control the day-to-day activities of the corporation.
  - C) are personally liable for the debts of the corporation.
  - D) are the sole owners of the corporation.

Answer: A

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 5) Stockholders
- A) select the board of directors of a corporation.
  - B) select the employees of a corporation.
  - C) select the managers of a corporation.
  - D) all of the above.

Answer: A

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 6) What do economists call the situation where a hired manager does not have the same interests as the owners of the business?

A) conquest and control  
 B) a financial problem  
 C) a principal-agent problem  
 D) a financial intermediary problem

Answer: C

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 7) The person hired by a corporation's board of directors to run the day-to-day operations of the corporation is known as the

A) chairman of the board.  
 B) chief executive officer.  
 C) owner-manager.  
 D) corporate governor.

Answer: B

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 8) By tying the salaries of top corporate managers to the price of the corporation's stock, corporations hope to avoid

A) corporate governance.  
 B) conflict between the CFO and the CEO.  
 C) the principal-agent problem.  
 D) paying high salaries to their managers.

Answer: C

Diff: 2 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 9) The existence of the principal-agent problem

A) increases the risk of buying stock in a corporation.  
 B) increases the risk of becoming the sole proprietor of a business.  
 C) implies that managers that have the same incentives as the board of directors.  
 D) does all of the above.

Answer: A

Diff: 2 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 10) A member of a corporate board of directors that is also a manager of the business is known as

A) a shareholder.  
 B) an inside director.  
 C) a partner.  
 D) a corporate governor.

Answer: B

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 11) The way in which a corporation is structured and the impact a corporation's structure has on the firm's behavior is referred to as
- A) corporate taxation.
  - B) structure composition theory.
  - C) structural behavior.
  - D) corporate governance.

Answer: D

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 12) A corporation's management
- A) owns the corporation.
  - B) hires the board of directors.
  - C) are liable for the corporation's debts.
  - D) operates and controls a corporation in its day-to-day activities.

Answer: D

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 13) Who hires the managers of a corporation?
- A) the board of directors
  - B) stockholders
  - C) managers
  - D) employees

Answer: A

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 14) Stockholders
- A) are liable for the debts of a corporation.
  - B) are the owners of a corporation.
  - C) control a corporation's day-to-day activities.
  - D) hire the managers of a corporation.

Answer: B

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

15) Who selects the board of directors of a corporation?

- A) the state where the corporation is chartered
- B) employees
- C) stockholders
- D) managers

Answer: C

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

16) Economists refer to the conflict between the interests of shareholders and the interests of top management as

- A) a stock-equity problem.
- B) a liability problem.
- C) a principal-agent problem.
- D) a financial intermediary problem.

Answer: C

Diff: 1 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

17) In many corporations, there is "separation of ownership from control." What does this mean?

- A) The shareholders control the corporation, although the board of directors owns the corporation.
- B) The managers of the corporation run the corporation, although the shareholders own the corporation.
- C) The board of directors controls corporate operations, although the managers of the corporation own the corporation.
- D) Top corporate managers only make decisions that have been approved unanimously by shareholders.

Answer: B

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

18) What can be done to deal with the principal-agent problem?

- A) threaten to liquidate the firm
- B) link top manager salaries to the profits of the firm or the price of the firm's stock
- C) have the CEO be a rotating position
- D) forbid managers from owning any company stock

Answer: B

Diff: 2 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 19) The existence of \_\_\_\_\_ increases the risk of buying stock in a corporation.
- A) the principal–agent problem
  - B) corporate governance
  - C) unlimited personal liability
  - D) employee–owned corporations

Answer: A

Diff: 2 Page Ref: 241

Topic: Principal–Agent

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 20) Steve Ballmer is the Chief Executive Officer of Microsoft as well as a member of Microsoft's board of directors. Ballmer is therefore classified as an
- A) inside director.
  - B) outside director.
  - C) independent director.
  - D) unbiased director.

Answer: A

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 21) Included on the board of directors of Microsoft are Dina Dublon, former chief financial officer of JP Morgan Chase, the president of Harvey Mudd college Maria M. Klawe, and the vice chairman of Bank of America Charles H. Noski. These three board members do not have a direct management role with Microsoft and are therefore referred to as
- A) inside directors.
  - B) outside directors.
  - C) competitive directors.
  - D) honorary directors.

Answer: B

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 22) Some corporate governance experts believe that serving on a company's board of directors for an extended length of time diminishes that member's independence from the company's CEO. If this is true, it would tend to
- A) reduce the principal–agent problem.
  - B) increase the principal–agent problem.
  - C) be in the best interest of shareholders.
  - D) have no impact on the company's performance, since the CEO is only one member of top management.

Answer: B

Diff: 2 Page Ref: 241

Topic: Principal–Agent

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking



- 23) Corporations are legally owned by their shareholders.

Answer: TRUE

Diff: 1 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 24) The principal-agent problem that exists between shareholders and managers also exists between managers and workers.

Answer: TRUE

Diff: 1 Page Ref: 242

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 25) Corporate managers and shareholders always have the same goals.

Answer: FALSE

Diff: 1 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 26) Members of management serving on the board of directors of a corporation are referred to as outside directors.

Answer: FALSE

Diff: 1 Page Ref: 242

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 27) In a corporation, what are "inside directors" and "outside directors"?

Answer: Inside directors are members of management who serve on the board of directors of the corporation. Outside directors are members of the board of directors of the corporation who do not have a direct management role in the corporation.

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 28) Explain what potential conflict exists between shareholders in a corporation and the corporation's managers.

Answer: The "principal-agent problem" exists anytime an agent pursues his or her own interests instead of the interests of the principal who hired the agent. In the context of corporations, this can occur if hired managers might not have the same set of goals that corporate owners have.

Diff: 2 Page Ref: 241

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 29) Explain the relationships between a corporation's shareholders, its board of directors, and its top managers.

Answer: Shareholders are the legal owners of a corporation. Shareholders elect the board of directors to represent their interests. The board of directors appoint members of top management to run the day-to-day operations of the corporation.

Diff: 2 Page Ref: 242

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 30) Who decides who controls a corporation?

Answer: Stockholders elect a board of directors that controls the corporation.

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 31) What is corporate governance?

Answer: Corporate governance refers to the way in which a corporation is structured and the effect a corporation's structure has on the firm's behavior.

Diff: 2 Page Ref: 241

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 32) How does the principal-agent problem extend to managers and employees?

Answer: Just as corporate shareholders (owners) cannot consistently monitor managers, managers cannot always monitor employees of the corporation. As a result, corporate employees may not have the same goals as their managers.

Diff: 2 Page Ref: 242

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 33) How can a corporation's board of directors and its managers try to reduce the principal-agent problem?

Answer: A corporation's board of directors can try to reduce the principal-agent problem by designing compensation policies for top managers that give them financial incentives to increase profits. A corporation's managers can try to reduce the principal-agent problem by designing compensation policies that give workers an incentive to work harder.

Diff: 2 Page Ref: 242

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 34) Scott is a manager at a pool cleaning business. He has hired 10 workers to clean pools for him and is considering what type of payment scheme he should set up for his workers. He can pay each of his workers \$10 per hour to clean pools, or he can pay his workers \$20 for each pool a worker cleans. (It takes 2 hours, on average, for an employee to clean a pool thoroughly.) If Scott wants to maximize the number of pools his workers clean in one day, which payment scheme should he use? Explain.

Answer: If Scott wants to maximize the number of pools his workers clean in one day, he should pay them \$20 for each pool so that workers also will have an incentive to clean as many pools as possible. However, if the workers are rushing through cleaning pools, it is likely that the pools will not be cleaned as thoroughly.

Diff: 2 Page Ref: 242

Topic: Principal-Agent

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

### 8.3 How Firms Raise Funds

- 1) How can a proprietorship or partnership raise funds for expansion?
  - A) borrow from someone or an institution willing to lend the funds
  - B) reinvest profit back into the business
  - C) take on a partner or more partners
  - D) Any of these would generate funds for expansion.

Answer: D

Diff: 1 Page Ref: 243

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 2) The central role of \_\_\_\_\_ in a market economy is bringing together savers and borrowers.
  - A) corporations
  - B) sole proprietors
  - C) financial intermediaries
  - D) stock exchanges

Answer: C

Diff: 1 Page Ref: 243

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 3) What takes place in the indirect finance market?
  - A) Part ownership of corporations is sold in the form of stocks.
  - B) Corporate and government bonds are sold to savers.
  - C) Deposits of savers are accepted and loans made to borrowers.
  - D) Government purchases of buildings and equipment are sold to the highest bidder.

Answer: C

Diff: 2 Page Ref: 243

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 4) Which of the following takes place in the direct finance market?
- A) Firms borrow funds from banks.
  - B) Deposits from savers are accumulated and loans made to borrowers.
  - C) Ownership in corporations is sold in the form of preferred stock.
  - D) Banks offer savings accounts to customers.

Answer: C

Diff: 1 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 5) If Southwest Airlines borrows \$20 million from a bank to finance the renovation of their corporate offices, this is an example of
- A) a bond market transaction.
  - B) indirect finance.
  - C) a stock market transaction.
  - D) direct finance.

Answer: B

Diff: 1 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 6) Southwest Airlines wants to raise \$20 million to finance the renovation of their corporate offices, and the company wishes to raise the funds through direct finance. Which of the following methods could it use?
- A) It could issue \$20 million in stocks.
  - B) It could sell \$20 million in bonds.
  - C) It could borrow \$20 million from a bank.
  - D) It could choose either A or B.

Answer: D

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 7) A bond is a financial security that represents
- A) ownership in a corporation.
  - B) the portion of profits paid to shareholders.
  - C) the interest rate paid on a share of stock.
  - D) a promise to repay a fixed amount of funds.

Answer: D

Diff: 1 Page Ref: 243

Topic: Bonds

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 8) What is different about buying stocks and buying bonds?
- A) A stock can possibly pay dividends forever, but bonds have a fixed number of payments.
  - B) Differences of opinion about a stock's future may vary considerably but there is less difference about a bond's future.
  - C) The future growth of a stock is more uncertain than the payments of a bond.
  - D) All these are differences between stocks and bonds.

Answer: D

Diff: 2 Page Ref: 243–245

Topic: Stocks vs. Bonds

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

9) Which of the following is a characteristic of stock?

- A) Stock represents a promise to repay a fixed amount of funds.
- B) The face value or principal plus interest is repaid at a specified period of time.
- C) The length of coupon payments is fixed by the stated maturity period.
- D) Stock represents ownership in a firm

Answer: D

Diff: 1 Page Ref: 245

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

10) Payments by a corporation to its shareholders are known as

- A) stocks.
- B) bonds.
- C) coupons.
- D) dividends.

Answer: D

Diff: 1 Page Ref: 245

Topic: Stocks

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

11) If a corporate bond with face value of \$1,000 has an interest rate of eight percent paid once a year for a term of 30 years, what is the size of the coupon payment?

- A) \$1,000
- B) \$300
- C) \$80
- D) \$8

Answer: C

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–18: Describe the fundamentals of capital markets and factors influencing the investment decision .

AACSB: Analytic thinking

12) If a corporate bond with a face value of \$5,000 pays yearly coupon payments of \$100, what is the coupon rate?

- A) 2%
- B) 5%
- C) 10%
- D) 20%

Answer: A

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 13) When an investor buys a corporate bond
- A) the investor becomes part owner of the corporation.
  - B) the principal of the bond is a loan to the corporation.
  - C) the interest made on the bond represents the bondholder's limited liability in the company.
  - D) the face value of the bond is equal to what the investor paid for the bond.

Answer: B

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 14) The interest payment on a bond is called
- A) the coupon payment.
  - B) principal.
  - C) the interest rate.
  - D) the face value.

Answer: A

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 15) If a corporation earns a profit, how do owners of the firm share in the profit?
- A) through coupon payments on that firm's bonds
  - B) through dividend payments on shares of that firm's stock
  - C) by selling any bonds or stocks owned and realizing a capital gain
  - D) by raising the interest rate on bonds

Answer: B

Diff: 2 Page Ref: 245

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 16) The profits a corporation keeps to finance future expansion are known as
- A) retained earnings.
  - B) preferred stock.
  - C) dividends.
  - D) capital gains.

Answer: A

Diff: 1 Page Ref: 243

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 17) If a corporation goes bankrupt, which of the following has first claim on the firm's assets?
- A) stockholders
  - B) the state where chartered
  - C) employees
  - D) bondholders

Answer: D

Diff: 2 Page Ref: 243

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

18) What is a primary market?

- A) a market where primary inputs like steel are sold
- B) a market where you can sell any bonds you own as a private investor
- C) a market where a newly issued claims are sold to initial buyers by the borrowing firm
- D) a market where you can sell any stocks you own as a private investor

Answer: C

Diff: 1 Page Ref: 246

Topic: Primary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

19) What happens in the secondary market?

- A) secondary inputs like electricity are sold
- B) a corporate financial manager will raise funds for expansion of the firm
- C) newly issued claims are sold by the borrowing firm to the initial buyer
- D) already issued claims are sold from one investor to another

Answer: D

Diff: 1 Page Ref: 246

Topic: Secondary Market

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

20) When you buy newly-issued shares of Facebook stock, this transaction takes place in the

- A) primary market.
- B) bond market.
- C) secondary market.
- D) bear market.

Answer: A

Diff: 1 Page Ref: 246

Topic: Primary Market

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

21) Which of the following is part of the secondary market?

- A) New York Stock Exchange
- B) the over-the-counter market
- C) NASDAQ
- D) all of these

Answer: D

Diff: 1 Page Ref: 246

Topic: Secondary Market

Learning Outcome: Micro-15: Discuss the role of differentiation in monopolistic competition in comparison to other market conditions.

AACSB: Analytic thinking

22) One of the most widely followed stock indexes in the United States is the Dow Jones Industrial Average. This index represents

- A) the stock prices of 500 large U.S. firms.
- B) an over-the-counter market.
- C) the stock prices of more than 4,000 U.S. firms.
- D) the stock prices of 30 large U.S. corporations.

Answer: D

Diff: 2 Page Ref: 247

Topic: Secondary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

23) When the coupon rate on newly issued bonds decreases relative to older, outstanding bonds, what happens?

- A) The market price of the older bond falls in the secondary market.
- B) The market price of the older bond rises in the secondary market.
- C) Older bonds can still be sold at their face value.
- D) Older bonds will sell for more than their face value.

Answer: B

Diff: 2 Page Ref: 246

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

24) You have a bond that pays \$60 per year in coupon payments. Which of the following would result in an increase in the price of your bond?

- A) Coupon payments on newly-issued bonds rise to \$80 per year.
- B) The likelihood that the firm issuing your bond will default on debt increases.
- C) The price of a share of stock in the company falls.
- D) Coupon payments on newly-issued bonds fall to \$50 per year.

Answer: D

Diff: 2 Page Ref: 246

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

25) Dividing the dividend payment by the stock's closing market price determines the

- A) coupon payment.
- B) dividend yield.
- C) price-earnings ratio.
- D) selling price of the stock.

Answer: B

Diff: 2 Page Ref: 246

Topic: Dividend Yield

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

26) What do the highest stock price and the lowest stock price over the previous year indicate?

- A) Add them together and divide by two to get the stock's current market price.
- B) what the stock's price-earnings ratio is
- C) how volatile the stock's market price has been
- D) They generate the dividend yield.

Answer: C

Diff: 2 Page Ref: 248-249

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking



- 27) Dividing the current market price of a stock by the firm's earnings per share gives the firm's
- A) price-earnings ratio.
  - B) year-to-date percentage change.
  - C) dividend yield.
  - D) stock coupon maturity yield.

Answer: A

Diff: 2 Page Ref: 248-249

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 28) In October 2013, General Motors (GM) posted a price-earnings ratio of 10.13. If the price of the stock at that time was \$36 per share, which of the following must have been *true*?
- A) GM's revenues that month were \$364.68 million.
  - B) GM's earnings per share was \$3.55.
  - C) GM's coupon payment was \$36 per year.
  - D) GM's dividend yield for the year was 36.5%.

Answer: B

Diff: 2 Page Ref: 248-249

Topic: Earnings per Share

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 29) Total dividend payments plus retained earnings divided by outstanding stock shares equals
- A) the price-earnings ratio.
  - B) earnings per share.
  - C) the dividend yield.
  - D) the year-to-date percentage change.

Answer: B

Diff: 2 Page Ref: 248-249

Topic: Earnings per Share

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 30) In 2013, the dividend yield on Abercrombie & Fitch (ANF) stock rose from a low of 1.33% in May to 2.24% in October. Which of the following would have generated that result?
- A) The closing price of ANF stock rose.
  - B) ANF announced an increase in the dividend it would pay per share.
  - C) The price-earnings ratio fell.
  - D) ANF issued bonds with a coupon rate equal to 2.24%.

Answer: B

Diff: 2 Page Ref: 248-249

Topic: Dividend Yield

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 31) Generally with bond ratings, the higher the rating, the \_\_\_\_\_ the interest rate an investor will receive and the \_\_\_\_\_ the risk that the issuer of the bond will default.
- A) higher; higher
  - B) higher; lower
  - C) lower; higher
  - D) lower; lower

Answer: D

Diff: 2 Page Ref: 244-245

Topic: Current Yield

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

32) In August 2011, Standard & Poor's (S&P) changed its rating on U.S. Treasury bonds from \_\_\_\_\_ based on the state of the federal government's budget deficit.

- A) "A" to "D"  
B) "A" to "AAA"  
C) "A+" to "B+"  
D) "AAA" to "AA+"

Answer: D

Diff: 1      Page Ref: 244-245

Topic: Current Yield

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

33) A proprietorship or partnership can raise funds for expansion in all of the following ways *except*

- A) borrowing from someone or an institution willing to lend the funds.
- B) reinvesting profit back into the business.
- C) taking on a partner or more partners.
- D) issuing stock through financial markets.

Answer: D

Diff: 2      Page Ref: 243

Topic: *Proprietorships and Partnerships*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

34) What is the central role of financial intermediaries in a market economy?

- A) the creation and printing of money
- B) keeping the price level stable
- C) bringing together savers and borrowers
- D) providing safe deposit boxes for people and businesses

Answer: C

Diff: 2      Page Ref: 243

*Topic: Financial Intermediaries*

*Learning Outcome: Macro-5: Describe the key components and functions of a financial system.*

AACSB: Analytic thinking

35) Raising funds through financial intermediaries is called

- A) direct finance.  
B) corporate finance.  
C) indirect finance.  
D) dividend reinvestment.

Answer: C

Diff: 1      Page Ref: 243

Topic: Financial Intermediaries

*Learning Outcome: Macro-5: Describe the key components and functions of a financial system.*

AACSB: Analytic thinking

- 36) Which of the following does *not* take place in the direct finance market?
- A) Ownership in corporations is sold in the form of common stock.
  - B) Deposits from savers are accumulated and loans made to borrowers.
  - C) Ownership in corporations is sold in the form of preferred stock.
  - D) Corporate bonds are sold to savers.

Answer: B

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 37) If Abercrombie & Fitch borrows \$8 million from a bank to finance the construction of a new store, this is an example of
- A) a stock market transaction.
  - B) direct finance.
  - C) a bond market transaction.
  - D) indirect finance.

Answer: D

Diff: 1 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 38) Abercrombie & Fitch wants to raise \$8 million to finance the construction of a new store, and the company wishes to raise the funds through direct finance. Which of the following methods could it use?
- A) It could sell \$8 million in bonds.
  - B) It could borrow \$8 million from a bank.
  - C) It could issue \$8 million in stocks.
  - D) It could choose either A or C.

Answer: D

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 39) A financial security that represents a promise to repay a fixed amount of funds is a
- A) share of stock.
  - B) coupon.
  - C) dividend.
  - D) bond.

Answer: D

Diff: 1 Page Ref: 243

Topic: Bonds

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 40) Dividends are
- A) financial securities which represent ownership in a corporation.
  - B) the yearly payments associated with bonds.
  - C) the interest rate paid on shares of stock.
  - D) payments by a corporation to its shareholders.

Answer: D

Diff: 1 Page Ref: 245

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 41) All of the following represent differences between stocks and bonds *except*
- A) a stock can possibly pay dividends forever, but bonds have a fixed number of payments.
  - B) differences of opinion about a stock's future may vary considerably but there is less difference about a bond's future.
  - C) the future growth of a stock is more uncertain than the payments of a bond.
  - D) bonds represent partial ownership in a firm but stocks do not.

Answer: D

Diff: 2 Page Ref: 243–245

Topic: Stocks vs. Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 42) Which of the following is a characteristic of a bond?
- A) A bond represents a promise to repay a fixed amount of funds.
  - B) The face value or principal plus interest is repaid at a specified period of time.
  - C) The length of coupon payments is fixed by the stated maturity period.
  - D) All of these are characteristic of bonds.

Answer: D

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 43) If a corporate bond with face value of \$5,000 has an interest rate of 4 percent paid once a year for a term of 30 years, what is the size of the coupon payment?
- A) \$4
  - B) \$200
  - C) \$1,250
  - D) \$5,000

Answer: B

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–18: Describe the fundamentals of capital markets and factors influencing the investment decision .

AACSB: Analytic thinking

- 44) If a corporate bond with a face value of \$2,000 pays yearly coupon payments of \$50, what is the coupon rate?
- A) 2.5%
  - B) 4%
  - C) 25%
  - D) 40%

Answer: A

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 45) When an investor buys a corporate bond, the \_\_\_\_\_ the bond is a loan to the corporation.
- A) interest on
  - B) face value of
  - C) coupon payment on
  - D) dividend payment on

Answer: B

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

46) The coupon rate of a bond is equal to

- A) the coupon payment.
- B) the interest payment.
- C) the interest rate.
- D) the face value.

Answer: C

Diff: 1 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

47) Owners of a corporation share in the profits of the firm

- A) by selling any bonds or stocks owned and realizing a capital gain.
- B) through coupon payments on that firm's bonds.
- C) through dividend payments on shares of that firm's stock.
- D) by raising the interest rate on bonds.

Answer: C

Diff: 2 Page Ref: 245

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

48) If a corporation retains all its profits and distributes none of the profit to owners, how can owners benefit?

- A) If the retained earnings are expected to create future profits, the market price of the firm's stock will increase and create a capital gain for stockholders if the stock is sold.
- B) Shares of stock can be converted into bonds so stockholders will be able to earn coupon payments.
- C) Owners will only benefit if some profits are paid out in the form of dividends.
- D) Owners will benefit by changing the board of directors.

Answer: A

Diff: 2 Page Ref: 245

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

49) If a corporation goes bankrupt, bondholders have \_\_\_\_\_ on the firm's assets.

- A) no claim
- B) third claim, after the IRS and stockholders,
- C) second claim, after stockholders,
- D) first claim

Answer: D

Diff: 2 Page Ref: 246

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

50) What is a secondary market?

- A) a market where factory seconds and damaged merchandise are sold
- B) a market where newly issued bonds are sold to initial buyers by the borrowing firm
- C) a market where a newly issued stocks are sold to initial buyers by the borrowing firm
- D) a market where you can sell any stocks you own as a private investor

Answer: D

Diff: 2 Page Ref: 243

Topic: Secondary Market

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

51) What happens in the primary market?

- A) primary inputs like electricity are sold
- B) a corporate financial manager will resell previously issued shares of stock
- C) newly issued claims are sold by the borrowing firm to the initial buyer
- D) already issued claims are sold from one investor to another

Answer: C

Diff: 1 Page Ref: 243

Topic: Primary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

52) The three most widely followed stock indexes in the United States include all of the following except

- A) the Dow Jones Industrial Average.
- B) the S&P 500.
- C) the Fortune 500.
- D) The NASDAQ.

Answer: C

Diff: 1 Page Ref: 247

Topic: Secondary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

53) When you buy previously-issued shares of Facebook stock, this transaction takes place in the

- A) primary market.
- B) bond market.
- C) secondary market.
- D) bear market.

Answer: C

Diff: 1 Page Ref: 246

Topic: Secondary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

54) Securities dealers that trade stocks and bonds outside exchanges comprise the

- A) foreign exchange market.
- B) over-the-counter market.
- C) NASDAQ market.
- D) outlet market.

Answer: B

Diff: 2 Page Ref: 246

Topic: Secondary Market

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

55) When the coupon rate on newly issued bonds increases relative to older, outstanding bonds, what happens?

- A) The market price of the older bond falls in the secondary market.
- B) The market price of the older bond rises in the secondary market.
- C) Older bonds can still be sold at their face value.
- D) Older bonds will sell for less than their face value.

Answer: A

Diff: 2 Page Ref: 243–244

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

56) You have a bond that pays \$60 per year in coupon payments. Which of the following would result in a decrease in the price of your bond?

- A) Coupon payments on newly-issued bonds fall to \$40 per year.
- B) The likelihood that the firm issuing your bond will default on debt decreases.
- C) The price of a share of stock in the company rises.
- D) Coupon payments on newly-issued bonds rise to \$75 per year.

Answer: D

Diff: 2 Page Ref: 243–244

Topic: Bonds

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

57) A stock's dividend yield is determined by

- A) dividing the dividend payment by the stock's initial price.
- B) dividing the dividend payment by the stock's closing market price.
- C) dividing the stock's closing market price by the dividend payment.
- D) subtracting the stock's initial purchase price from the stocks' closing market price on a given day.

Answer: B

Diff: 2 Page Ref: 248–249

Topic: Dividend Yield

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

58) The volatility of a stock's market price is indicated by

- A) the highest stock price and the lowest stock price over the previous year.
- B) the price of newly issued shares compared to the price of previously issued shares.
- C) the difference between the stock's selling price and its asking price.
- D) the stock's price–earnings ratio.

Answer: A

Diff: 2 Page Ref: 248–249

Topic: Stocks

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

59) How is a stock's price-earnings ratio found?

- A) by dividing the dividend by the closing price of the stock
- B) by dividing the dividend by the firm's earnings per share
- C) by dividing current market price of the stock by the firm's earnings per share
- D) by subtracting the firm's earnings per share from the closing price of the stock

Answer: C

Diff: 2 Page Ref: 248-249

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

60) In October 2013, Abercrombie & Fitch (ANF) posted a price-earnings ratio of 13. If the price of the stock at that time was \$36 per share, which of the following must have been *true*?

- A) ANF's revenues that month were \$4.68 million.
- B) ANF's earnings per share was \$2.77.
- C) ANF's coupon payment was \$23.23 per year.
- D) ANF's dividend yield for the year was 47%.

Answer: B

Diff: 2 Page Ref: 248-249

Topic: Earnings per Share

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

61) What are earnings per share equal to?

- A) the last dividend payment made
- B) total dividend payments plus retained earnings divided by outstanding stock shares
- C) the amount by which the stock's market price has increased in the last year
- D) revenues divided by the number of stockholders

Answer: B

Diff: 2 Page Ref: 248-249

Topic: Earnings per Share

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

62) A bond's coupon payment divided by the bond's current price is equal to the bond's

- A) dividend yield.
- B) current yield.
- C) price-earnings ratio.
- D) maturity value.

Answer: B

Diff: 1 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

63) In 2011, the dividend yield on Microsoft (MSFT) stock rose from 1.97% to 3.10%. Which of the following would have generated that result?

- A) The closing price of Microsoft stock rose.
- B) Microsoft announced an increase in the dividend it would pay per share.
- C) The price-earnings ratio rose.
- D) Microsoft issued bonds with a coupon rate equal to 3.10%.

Answer: B



Diff: 3 Page Ref: 248–249

Topic: Dividend Yield

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 64) When Zynga, the company behind the social games *CityVille* and *Words With Friends*, sold stock to the public for the first time in December 2011, funds were being raised in a \_\_\_\_\_ market, and when those newly issued shares are resold to other buyers, the sales take place in a \_\_\_\_\_ market.

A) primary; primary

B) primary; secondary

C) secondary; primary

D) secondary; secondary

Answer: B

Diff: 1 Page Ref: 243

Topic: Fund Raising

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

### Article Summary

Starting as a Chicago antique store that sold sandwiches on the side, Potbelly has grown from this 1977 beginning into a company which today operates approximately 300 sandwich shops in the United States. In October 2013, Potbelly sold stock for the first time through an initial public offering (IPO), with shares jumping in price from the initial offering price of \$14 to more than \$32 on the same day. Since 2011, Potbelly has seen an increase in in both sales and revenue, and earned a profit of \$2.8 million in the first half of 2013.

Source: Matt Krantz, "Potbelly IPO shares more than double on open," *USA Today*, October 4, 2013.

- 65) When Potbelly sold stock to the public in its IPO, it did so through the NASDAQ market. This was an example of Potbelly raising funds through

A) reinvesting retained earnings.

B) a financial intermediary.

C) dividend reinvestment.

D) a financial market.

Answer: D

Diff: 1 Page Ref: 243

Topic: Fund Raising

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 66) When Potbelly sold stock to the public in its IPO, it did so through the NASDAQ market. This was an example of Potbelly using \_\_\_\_\_ to raise funds.

A) indirect finance

B) direct finance

C) bonds

D) corporate governance

Answer: B

Diff: 1 Page Ref: 243

Topic: Fund Raising

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 67) Generally with bond ratings, the lower the rating, the \_\_\_\_\_ the interest rate an investor will receive and the \_\_\_\_\_ the risk that the issuer of the bond will default.

A) higher; higher      B) higher; lower      C) lower; higher      D) lower; lower

Answer: A

Diff: 2      Page Ref: 244–245

Topic: Current Yield

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 68) If you purchase a share of stock from your friend who initially purchased the stock three years ago, your purchase of the stock represents a transaction in the secondary financial market

Answer: TRUE

Diff: 1      Page Ref: 243

Topic: Secondary Market

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 69) Direct finance includes the sale by a corporation of stocks or bonds, but does not include borrowing money from a bank.

Answer: TRUE

Diff: 2      Page Ref: 243

Topic: Fund Raising

Learning Outcome: Macro–5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 70) If you purchase a share of stock from your friend who initially purchased the stock three years ago, your purchase of the stock represents a transaction in the primary financial market

Answer: FALSE

Diff: 1      Page Ref: 243

Topic: Secondary Market

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 71) Indirect finance includes the sale by a corporation of stocks or bonds, but does not include borrowing money from a bank.

Answer: FALSE

Diff: 2      Page Ref: 243

Topic: Financial Intermediaries

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 72) How can a partnership raise funds needed for firm expansion?

Answer: By retaining earnings, taking on additional partners, or borrowing from relatives, friends, or a bank.

Diff: 1      Page Ref: 243

Topic: Proprietorships and Partnerships

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

73) What is a corporate bond and what does it specify?

Answer: A bond is a promise to repay a fixed amount of funds with the coupon rate, the face value of the bond, and the maturity period specified.

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

74) How do firms raise external funds through indirect finance?

Answer: With indirect finance, funds flow from savers to borrowers through financial intermediaries such as banks.

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

75) If you own a bond with a seven percent coupon rate and new bonds are paying five percent, what will happen to your bond's market price?

Answer: It will go up.

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

76) What is the difference between retained earnings and dividends?

Answer: Retained earnings are profits kept by a corporation to be used for financing future expansion. Dividends are profits paid to shareholders.

Diff: 1 Page Ref: 245

Topic: Corporations

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

77) How can a sole proprietorship raise funds needed for firm expansion?

Answer: By retaining earnings, taking on partners, or borrowing from relatives, friends, or a bank.

Diff: 1 Page Ref: 243

Topic: Proprietorships and Partnerships

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

78) How does a firm raise external funds through direct finance?

Answer: With direct finance, funds flow from savers to firms through financial markets, such as the New York Stock Exchange.

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

79) Who is the seller in a primary market and who is the seller in a secondary market?

Answer: The corporation issuing a bond or a stock is the seller in a primary market, while anyone who holds a stock or bond can sell in the secondary market.

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

80) If you own a bond with a 3 percent coupon rate and new bonds are paying 8 percent, what will happen to your bond's market price?

Answer: It will go down.

Diff: 2 Page Ref: 243

Topic: Bonds

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

81) What role do well functioning financial markets play in a market economy?

Answer: They allocate saved funds to the best use of these funds.

Diff: 2 Page Ref: 243

Topic: Financial Markets

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

## 8.4 Using Financial Statements to Evaluate a Corporation

1) What are liabilities?

- A) anything of value owned by a person or a business
- B) anything a person or a business owes to entities outside the business
- C) the total cost of labor for a firm
- D) only those unpaid expenses for which a business or person is making interest payments

Answer: B

Diff: 1 Page Ref: 250

Topic: Liabilities

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

2) An explicit cost is

- A) a nonmonetary opportunity cost.
- B) a cost specifically related to government rules and regulations.
- C) a cost that involves spending money.
- D) a cost unique to corporations.

Answer: C

Diff: 1 Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 3) An asset is
- A) anything of value owned by a person or a firm.
  - B) a payment by a corporation to its shareholders.
  - C) a nonmonetary opportunity cost.
  - D) anything owed by a person or a firm.

Answer: A

Diff: 1 Page Ref: 250

Topic: Assets

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 4) Which of the following is an example of an implicit cost a firm might incur?
- A) the out-of-pocket expense to hire resources
  - B) taxes owed to the state and Federal governments
  - C) the rental value of the office space the company owns and uses for itself
  - D) the revenue a firm generates in using its resources

Answer: C

Diff: 2 Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 5) What is accounting profit?
- A) gross revenue minus explicit costs
  - B) gross revenue minus implicit costs
  - C) gross revenue minus explicit and implicit costs
  - D) the same as economic profit

Answer: A

Diff: 1 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 6) Which of the following would explain why accounting profit might be greater than economic profit?
- A) A firm has implicit costs as well as explicit costs.
  - B) A firm has only explicit costs.
  - C) A firm's net income is greater than its accounting profit.
  - D) A firm's net income is less than its accounting profit.

Answer: A

Diff: 2 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 7) A normal rate of return refers to the \_\_\_\_\_ that investors must earn on the funds they invest in a firm, expressed as a percentage of the amount invested.
- A) minimum amount                      B) maximum amount  
C) total amount                         D) profit

Answer: A

Diff: 2      Page Ref: 250

*Topic: Profit*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 8) Laura's Pizza Place incurs \$800,000 per year in explicit costs and \$100,000 in implicit costs. The restaurant earns \$1.3 million in revenues and has \$5 million in net worth. Based on this information, what is economic profit for Laura's Pizza Place?
- A) \$200,000                      B) \$400,000                      C) \$500,000                      D) \$2.8 million

Answer: B

Diff: 2      Page Ref: 250

*Topic: Profit*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 9) Laura's Pizza Place incurs \$800,000 per year in explicit costs and \$100,000 in implicit costs. The restaurant earns \$1.3 million in revenues. Based on this information, what is accounting profit for Laura's Pizza Place?
- A) \$200,000                  B) \$400,000                  C) \$500,000                  D) \$900,000

Answer: C

Diff: 2      Page Ref: 250

*Topic: Profit*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 10) Tanesha sells homemade candles over the Internet. Her annual revenue is \$64,000 per year, the explicit costs of her business are \$17,000, and the opportunity costs of her business are \$22,000. What is her accounting profit?
- A) \$17,000                  B) \$22,000                  C) \$47,000                  D) \$64,000

Answer: C

Diff: 2      Page Ref: 250

*Topic: Profit*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 11) Tanesha sells homemade candles over the Internet. Her annual revenue is \$64,000 per year, the explicit costs of her business are \$17,000, and the opportunity costs of her business are \$22,000. What are the implicit costs of her business?
- A) \$17,000                  B) \$22,000                  C) \$39,000                  D) \$47,000

Answer: B

Diff: 2      Page Ref: 250

*Topic: Costs*

*Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.*

AACSB: Analytic thinking

- 12) Tanesha sells homemade candles over the Internet. Her annual revenue is \$64,000 per year, the explicit costs of her business are \$17,000, and the opportunity costs of her business are \$22,000. What is her economic profit?

A) \$17,000                      B) \$25,000                      C) \$42,000                      D) \$47,000

Answer: B

Diff: 2      Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 13) A firm's net income is also its

A) economic profit.    B) balance sheet.  
C) accounting profit.    D) opportunity cost.

Answer: C

Diff: 1      Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 14) A nonmonetary opportunity cost is called a(n) \_\_\_\_\_, while a cost that involves spending money is called a(n) \_\_\_\_\_.

A) accounting cost; explicit cost    B) implicit cost; explicit cost  
C) accounting profit; economic profit    D) normal rate of return; asset

Answer: B

Diff: 1      Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 15) All of the following would be considered explicit costs of operating a business *except*

A) rent paid to a landlord.    B) bonuses paid to employees.  
C) a normal rate of return for investors.    D) corporate income taxes.

Answer: C

Diff: 3      Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 16) What is shown on a firm's income statement?

A) costs  
B) profits  
C) revenues  
D) All of these are shown on a firm's income statement.

Answer: D

Diff: 1      Page Ref: 250

Topic: Income Statement

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

17) The difference between a firm's assets and liabilities is its

- A) accounting profit.
- B) economic profit.
- C) net worth.
- D) implicit costs.

Answer: C

Diff: 1 Page Ref: 250

Topic: Balance Sheet

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

18) Anything owed by a person or a firm is

- A) an asset.
- B) a liability.
- C) a bond.
- D) equity.

Answer: B

Diff: 1 Page Ref: 250

Topic: Liabilities

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

19) An implicit cost is

- A) a nonmonetary opportunity cost.
- B) a cost unique to sole proprietorships.
- C) a cost that involves spending money.
- D) a cost unique to corporations.

Answer: A

Diff: 2 Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

20) All of the following are examples of explicit cost a firm might incur *except*

- A) the out-of-pocket expense to hire employees.
- B) taxes owed to the state government.
- C) the rental value of the warehouse space the company owns and uses for itself.
- D) the revenue a firm generates in using its resources.

Answer: C

Diff: 2 Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

21) What is economic profit?

- A) gross revenue minus explicit costs
- B) gross revenue minus implicit costs
- C) gross revenue minus explicit and implicit costs
- D) the same as accounting profit

Answer: C

Diff: 1 Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking



22) Which of the following would explain why economic profit might be less than accounting profit?

- A) A firm's net income is less than its accounting profit.
- B) A firm has only explicit costs.
- C) A firm's net income is greater than its accounting profit.
- D) A firm has implicit costs as well as explicit costs.

Answer: D

Diff: 2 Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

23) The minimum amount that investors must earn on the funds they invest in a firm, expressed as a percentage of the amount invested, is referred to as

- A) the explicit costs of production.
- B) net worth.
- C) net income.
- D) a normal rate of return.

Answer: D

Diff: 2 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

24) Donnie's Donuts incurs \$450,000 per year in explicit costs and \$200,000 in implicit costs. The bakery earns \$800,000 in revenues and has \$2 million in net worth. Based on this information, what is the economic profit for Donnie's Donuts?

- A) \$150,000
- B) \$350,000
- C) \$600,000
- D) \$1.2 million

Answer: A

Diff: 2 Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

25) Donnie's Donuts incurs \$450,000 per year in explicit costs and \$200,000 in implicit costs. The bakery earns \$800,000 in revenues and has \$2 million in net worth. Based on this information, what is the accounting profit for Donnie's Donuts?

- A) \$150,000
- B) \$350,000
- C) \$600,000
- D) \$1.2 million

Answer: B

Diff: 2 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

26) Jake sells Star Wars memorabilia on eBay. His annual revenue is \$42,000 per year, and the explicit costs of his business are \$10,000. What is his accounting profit?

- A) \$10,000
- B) \$22,000
- C) \$32,000
- D) \$42,000

Answer: C

Diff: 2 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 27) Jake sells Star Wars memorabilia on eBay. His annual revenue is \$42,000 per year, the explicit costs of his business are \$10,000, and the opportunity costs of his business are \$18,000 per year. What are the implicit costs of his business?

A) \$8,000                      B) \$18,000                      C) \$24,000                      D) \$32,000

Answer: B

Diff: 3      Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 28) Jake sells Star Wars memorabilia on eBay. His annual revenue is \$42,000 per year, the explicit costs of his business are \$10,000, and the opportunity costs of his business are \$18,000 per year. What is his economic profit?

A) \$14,000                      B) \$24,000                      C) \$32,000                      D) \$34,000

Answer: B

Diff: 3      Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 29) A firm's accounting profit is also its

A) economic profit.                      B) income statement.  
C) net income.                      D) statement of liabilities.

Answer: C

Diff: 1      Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 30) \_\_\_\_\_ is called an implicit cost, while \_\_\_\_\_ is called an explicit cost.

A) An accounting cost; an economic cost  
B) A nonmonetary opportunity cost; a cost that involves spending money  
C) A production cost; a sales cost  
D) An actual cost; a hypothetical cost

Answer: B

Diff: 1      Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 31) Which of the following would be considered an implicit cost of operating a business?

A) advertising expenses                      B) wages paid to workers  
C) a normal rate of return for investors                      D) any explicit cost

Answer: C

Diff: 2      Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 32) The financial statement that sums up a firm's revenues, costs, and profit over a period of time is its

A) income statement. B) balance sheet.  
C) dividend yield statement. D) price-earnings statement.

Answer: A

Diff: 1 Page Ref: 250

Topic: Income Statement

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 33) A firm's net worth is calculated as

A) the difference between a firm's revenues and explicit costs.  
B) the difference between a firm's revenues and implicit costs.  
C) the difference between a firm's assets and liabilities.  
D) the difference between a firm's liabilities and outstanding equities.

Answer: C

Diff: 1 Page Ref: 250

Topic: Balance Sheet

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 34) Accounting profit is the difference between a firm's revenue and its opportunity costs.

Answer: FALSE

Diff: 1 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 35) A decrease in liabilities will reduce a firm's net worth.

Answer: FALSE

Diff: 1 Page Ref: 250

Topic: Liabilities

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 36) Economic profit is the difference between a firm's revenue and its opportunity costs.

Answer: TRUE

Diff: 1 Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 37) An increase in liabilities will reduce a firm's net worth.

Answer: TRUE

Diff: 1 Page Ref: 250

Topic: Liabilities

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

38) What is the difference between explicit and implicit costs?

Answer: Explicit costs are out-of-pocket expenditures for resources hired from outside the firm while implicit costs are opportunity costs for using firm-owned resources.

Diff: 2 Page Ref: 250

Topic: Costs

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

39) How is accounting profit found?

Answer: Accounting profit equals total revenues minus explicit costs.

Diff: 2 Page Ref: 250

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

40) What is a firm's balance sheet?

Answer: A firm's balance sheet is a financial statement that sums up a firm's financial position on a particular day, usually the end of a quarter or year.

Diff: 2 Page Ref: 251

Topic: Balance Sheet

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

41) How is economic profit found?

Answer: Economic profits equal total revenues minus explicit and implicit costs.

Diff: 2 Page Ref: 251

Topic: Profit

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

## 8.5 Corporate Governance Policy and the Financial Crisis of 2007–2009

1) Why do corporations want to keep the price of their stock high?

- A) A higher stock price increases the funds the firm can raise when it sells a given amount of stock.
- B) Corporations can pay their managers lower salaries and avoid principal–agent problems when stock prices are higher.
- C) Higher stock prices are correlated with lower expected profitability.
- D) All of the above provide incentive for corporations to keep the price of their stock high.

Answer: A

Diff: 2 Page Ref: 251

Topic: Corporate Structure

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

2) An investor is more likely to buy a firm's stock if the firm's income statement shows \_\_\_\_\_ and if its balance sheet shows \_\_\_\_\_.

- A) a large net worth; a large price–earnings ratio
- B) a large after-tax profit; a large net worth
- C) a large price–earnings ratio; a large dividend yield
- D) low opportunity costs; large liabilities

Answer: B

Diff: 2 Page Ref: 251

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 3) In 2002, the Enron corporation was accused of falsifying information regarding liabilities on Enron's balance sheets, thereby

- A) increasing Enron's assets on the balance sheet.
- B) reducing Enron's profit on the balance sheet.
- C) increasing Enron's net worth on the balance sheet.
- D) reducing Enron's net income on the income statement.

Answer: C

Diff: 2 Page Ref: 251

Topic: Balance Sheet

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 4) In response to accounting scandals in 2002, the federal government passed legislation requiring that corporate directors have a certain level of expertise with financial information and mandating that chief executive officers personally certify the accuracy of financial statements. What is the name of this legislation?

- A) the Accountant Reliability Act
- B) the 24th amendment to the Constitution
- C) the Kennedy-Lott Act
- D) the Sarbanes-Oxley Act

Answer: D

Diff: 1 Page Ref: 251-252

Topic: Financial Statements

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 5) In May 2012, Facebook stock sold for \$38 per share in its initial public offering (IPO). More than a year later, in June 2013, the value of Facebook stock

- A) had more than doubled in price.
- B) had declined by nearly 40 percent from the IPO price.
- C) languished at the same \$38 per share price.
- D) had increased by almost 60 percent from the IPO price.

Answer: B

Diff: 1 Page Ref: 254-255

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 6) In addition to requiring that CEO's personally certify the accuracy of financial statements, the Sarbanes-Oxley Act of 2002 also requires that

- A) CEO's conduct audits of their corporations themselves.
- B) firms raise funds for expansion through the sale of bonds only, not stocks.
- C) auditors disclose any potential conflicts of interest.
- D) corporations issue financial statements monthly rather than quarterly.

Answer: C

*Diff: 1 Page Ref: 251–252*

*Topic: Financial Statements*

*Learning Outcome: Macro–5: Describe the key components and functions of a financial system.*

*AACSB: Analytic thinking*

- 7) When groups of mortgages are bundled together by financial institutions and sold to investors, these institutions are said to be \_\_\_\_\_ mortgage loans.

A) securitizing                      B) underwriting                      C) liquidating                      D) harvesting

Answer: B

*Diff: 1 Page Ref: 252*

*Topic: Financial Markets*

*Learning Outcome: Macro–5: Describe the key components and functions of a financial system.*

*AACSB: Analytic thinking*

- 8) Mortgages issued to borrowers whose credit histories include failures to make payments on bills are known as \_\_\_\_\_ mortgages.

A) catastrophic                      B) variable rate                      C) subprime                      D) Alt-A

Answer: C

*Diff: 1 Page Ref: 252*

*Topic: Financial Markets*

*Learning Outcome: Macro–5: Describe the key components and functions of a financial system.*

*AACSB: Analytic thinking*

- 9) Traditionally, Wall Street investment banks had been organized as partnerships, but by 2000 they had converted to being publicly traded companies. As partnerships, the principal–agent problem is \_\_\_\_\_ because there is \_\_\_\_\_ separation of ownership from control.

A) reduced; much                      B) reduced; little  
C) increased; much                      D) increased; little

Answer: B

*Diff: 1 Page Ref: 253*

*Topic: Principal–Agent*

*Learning Outcome: Macro–5: Describe the key components and functions of a financial system.*

*AACSB: Analytic thinking*

- 10) What is the Congressional act, enacted in 1933 and repealed in 1999, which prevented financial firms from being both commercial banks and investment banks?

A) the Sarbanes–Oxley Act                      B) the Glass–Steagall Act  
C) the Taft–Hartley Act                      D) the Cellar–Kefauver Act

Answer: B

*Diff: 1 Page Ref: 253*

*Topic: Financial Intermediaries*

*Learning Outcome: Macro–5: Describe the key components and functions of a financial system.*

*AACSB: Analytic thinking*

- 11) Firms disclose financial statements in \_\_\_\_\_ and in \_\_\_\_\_.  
 A) periodic filings to the federal government; annual reports to shareholders  
 B) daily filings to the federal government; daily reports to shareholders  
 C) monthly reports to shareholders; 5-year balance statements to the board of directors  
 D) weekly filings with the SEC; monthly reports to the Fed

Answer: A

Diff: 2 Page Ref: 251

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 12) The financial statements of firms generally are audited by  
 A) employees of the firm being audited.  
 B) employees of private accounting firms.  
 C) employees of the federal government.  
 D) the board of directors of the corporation being audited.

Answer: B

Diff: 2 Page Ref: 251

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 13) Two of the firms involved in the accounting scandals of the early 2000s were  
 A) Arthur Anderson and NBC.  
 B) Western Digital and General Motors.  
 C) WorldCom and Enron.  
 D) DuPont and Lehman Brothers.

Answer: C

Diff: 2 Page Ref: 251

Topic: Firms

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

- 14) David Myers, former controller for WorldCom, pleaded guilty to falsely reported costs for WorldCom that were \_\_\_\_\_ than they actually were, resulting in reported accounting profits for WorldCom that were \_\_\_\_\_ than their actual level.  
 A) higher; higher  
 B) lower; higher  
 C) lower; lower  
 D) higher; lower

Answer: B

Diff: 1 Page Ref: 251

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 15) Mortgages issued to borrowers who fail to document that their incomes are high enough to afford their mortgage payments are known as \_\_\_\_\_ mortgages.  
 A) subprime  
 B) Alt-A  
 C) gray market  
 D) reciprocal

Answer: B

Diff: 1 Page Ref: 252

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 16) One result of the financial meltdown of the late 2000s was that mortgage institutions \_\_\_\_\_ and \_\_\_\_\_ were brought under direct control of the government.
- A) Fannie Mae; Freddie Mac  
B) Glass Steagall; Sarbanes Oxley  
C) Goldman Sachs; Morgan Stanley  
D) Lehman Brothers; FDIC

Answer: A

Diff: 1 Page Ref: 252

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 17) When someone takes out a mortgage loan to buy a house, the mortgage lender can take possession of the house and sell it if the borrower defaults by failing to make payments on the loan because the house is being pledged as \_\_\_\_\_ for the loan.
- A) goodwill  
B) a liability  
C) insurance  
D) collateral

Answer: D

Diff: 1 Page Ref: 252

Topic: Financial Intermediaries

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 18) The Sarbanes-Oxley Act of 2002 was passed in response to what event?
- A) a series of accounting scandals  
B) unexpected increases in dividend payments to stockholders at various corporations  
C) volatility in NASDAQ indexes  
D) historically low bond prices

Answer: A

Diff: 1 Page Ref: 252

Topic: Financial Statements

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 19) Traditionally, Wall Street investment banks had been organized as partnerships, but by 2000 they had converted to being publicly traded corporations. As partnerships, the principle-agent problem is \_\_\_\_\_, but as publicly traded corporations, the principal-agent problem is often \_\_\_\_\_.
- A) increased; more severe  
B) increased; less severe  
C) reduced; more severe  
D) reduced; less severe

Answer: C

Diff: 1 Page Ref: 253

Topic: Principal-Agent

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 20) The Sarbanes-Oxley Act of 2002 requires that CEOs personally certify the accuracy of financial reports.

Answer: TRUE

Diff: 1 Page Ref: 252

Topic: Financial Statements

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking



- 21) Purchasing a firm's stock in an IPO can be risky because financial information may not be fully disclosed.

Answer: TRUE

Diff: 1 Page Ref: 254–255

Topic: Financial Statements

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 22) The Sarbanes–Oxley Act of 2002 requires that each member of the board of directors personally certify the accuracy of financial reports.

Answer: FALSE

Diff: 1 Page Ref: 252

Topic: Financial Statements

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 23) Briefly describe the Sarbanes–Oxley Act and explain why it was passed.

Answer: The Sarbanes–Oxley Act of 2002 was enacted as a safeguard against scandals like the accounting scandals of the early 2000s, and was intended to increase confidence in the U.S. corporate governance system. The act requires that CEOs personally certify the accuracy of financial statements and that financial analysts and auditors disclose whether any conflicts of interest might exist that would limit their independence in evaluating a firm's financial condition.

Diff: 2 Page Ref: 252

Topic: Financial Statements

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 24) During 2007, many "subprime" and "Alt-A" borrowers began to default on their mortgages. Describe "subprime" and "Alt-A" borrowers.

Answer: "Subprime" borrowers are borrowers whose credit histories include failures to make payments on bills. "Alt-A" borrowers are borrowers who fail to document that their incomes are high enough to afford their mortgage payments.

Diff: 2 Page Ref: 252

Topic: Financial Markets

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 25) What was the source of the problems encountered by many financial firms during the late 2000s?

Answer: The primary source of the problems was that financial firms began securitizing home mortgages. This created a large increase in mortgages being granted to "sub-prime" borrowers, who are borrowers with flawed credit histories, and "Alt-A" borrowers, who did not have to document their incomes when applying for mortgages. When housing prices began falling in 2006, many of these borrowers began to default on their mortgages, causing many financial institutions to suffer heavy losses.

Diff: 2 Page Ref: 252–253

Topic: Corporate Structure

Learning Outcome: Micro–9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

## 8.6 Appendix: Tools to Analyze Firms' Financial Information

- 1) Which of the following is operating income?
- A) explicit plus implicit costs
  - B) stockholders' equity
  - C) revenue minus operating expenses
  - D) net profit

Answer: C

Diff: 1 Page Ref: 266

Topic: Operating Income

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 2) If a dollar a year from now will likely have less purchasing power because of inflation, then a dollar today \_\_\_\_\_ a dollar a year from now.
- A) is more valuable than
  - B) is less valuable than
  - C) has the same value as
  - D) may be more valuable or less valuable than

Answer: A

Diff: 1 Page Ref: 261

Topic: Present Value

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 3) If you put \$100 into a bank account that earns five percent interest per year, what is the formula you should use to determine the account's future value in one year?
- A) Future value equals the present value divided by the rate of interest.
  - B) Future value equals the present value multiplied by the rate of interest.
  - C) Future value equals the present value multiplied by one plus the rate of interest in decimals.
  - D) All of these yield the same answer.

Answer: C

Diff: 2 Page Ref: 262

Topic: Future Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 4) If you want to know the present value of \$10,000 received in one year, and the interest rate is 4 percent, what formula can you use?
- A) Present value equals \$10,000 times 0.04.
  - B) Present value equals \$10,000 divided by 1.04
  - C) Present value equals 1.04 divided by \$10,000.
  - D) Present value equals \$10,000 times 1.04.

Answer: B

Diff: 2 Page Ref: 262

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 5) The present value of \$300 received 5 years in the future would be calculated as which of the following when the interest rate is 5%?

A)  $300/(1.5)^5$       B)  $300/(1.05)^5$       C)  $300 \times 1.5 \times 5$       D)  $5.05/300$

Answer: B

Diff: 2      Page Ref: 262

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 6) What is the present value of \$575 in a one year if the current rate of interest is 4 percent?

A) \$410.71      B) \$552.88      C) \$598      D) \$805

Answer: B

Diff: 2      Page Ref: 262

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 7) If you own a \$1,000 face value bond with one year remaining to maturity and a five percent coupon rate and new bonds are paying 12 percent, what is the most you can get for your old bond?

A) \$1,120  
B) \$1,000  
C) \$937.50  
D) impossible to determine without additional information

Answer: C

Diff: 3      Page Ref: 264

Topic: Present Value

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 8) If a stock's dividend is expected to grow at a constant rate of 6 percent in the future and it has just paid a dividend of \$3.00 per share, and you have an alternative investment of equal risk that will earn a 9 percent rate of return, what would you be willing to pay per share for this stock?

A) \$9      B) \$20      C) \$45      D) \$106

Answer: D

Diff: 3      Page Ref: 265

Topic: Stocks

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 9) What must balance on a balance sheet?
- A) Total assets must equal total liabilities plus equity.
  - B) Revenues must equal costs.
  - C) Retained earnings plus dividends paid must equal earnings per share.
  - D) All of these must balance.

Answer: A

Diff: 2 Page Ref: 267

Topic: Balance Sheet

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 10) On a balance sheet, short-term debts such as accounts payable are listed as
- A) current assets.
  - B) current liabilities.
  - C) stockholder's equity.
  - D) goodwill.

Answer: B

Diff: 2 Page Ref: 267

Topic: Balance Sheet

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 11) How much is a bond that pays \$50 in coupon payments for 3 years and \$1,000 at the end of the third year worth if the interest rate is 10%?
- A) \$876
  - B) \$952
  - C) \$1,045
  - D) \$1,150

Answer: A

Diff: 2 Page Ref: 264

Topic: Present Value

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 12) The value you give today to money you will receive in the future is called the future payment's
- A) time-sensitive value.
  - B) future value.
  - C) present value.
  - D) historical value.

Answer: C

Diff: 1 Page Ref: 261

Topic: Present Value

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 13) Why is a dollar today more valuable than a dollar a year from now?
- A) The dollar today can be immediately used to buy something.
  - B) A dollar a year from now will likely have less purchasing power because of inflation.
  - C) The unknown future is riskier than the known present.
  - D) all of these

Answer: D

Diff: 1 Page Ref: 261

Topic: Present Value

Learning Outcome: Macro-1: Define macroeconomics and identify its basic concerns.

AACSB: Analytic thinking

- 14) What is the formula you should use to determine a bank account's future value in one year?
- A) Future value equals the present value plus the rate of interest.
  - B) Future value equals the present value minus the rate of interest.
  - C) Future value equals the present value multiplied by one plus the rate of interest in decimals.
  - D) Future value equals the present value divided by one plus the rate of interest in decimals.

Answer: C

Diff: 2 Page Ref: 262

Topic: Future Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 15) If you want to know the present value of a future payment received in one year, what formula can you use?
- A) Present value equals future payment times the current market rate of interest.
  - B) Present value equals future payment divided by one plus the rate of interest.
  - C) Present value equals one plus the rate of interest in decimals divided by future payment.
  - D) Present value equals future payments times one plus the rate of interest.

Answer: B

Diff: 2 Page Ref: 262

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 16) The present value of \$475 received 3 years in the future would be calculated as which of the following when the interest rate is 6 percent?

- A)  $475/(1.6)^3$
- B)  $475/(1.06)^3$
- C)  $475 \times 1.6 \times 3$
- D)  $3.06/475$

Answer: B

Diff: 2 Page Ref: 264

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 17) What is the present value of \$888 in a one year if the current rate of interest is five percent?
- A) \$4,440
  - B) \$845.71
  - C) \$177.60
  - D) none of these

Answer: B

Diff: 2 Page Ref: 264

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 18) If you own a \$1,000 face value bond with one year remaining to maturity and a 3 percent coupon rate and new bonds are paying 14 percent, what is the most you can get for your old bond?

A) \$903.51                      B) \$997.19                      C) \$1,000                      D) \$1,140

Answer: A

Diff: 2      Page Ref: 264

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 19) If a stock's dividend is expected to grow at a constant rate of eight percent in the future and it has just paid a dividend of \$1.25 a share, and you have an alternative investment of equal risk that will earn a 12 percent rate of return, what would you be willing to pay per share for this stock?

A) \$31.25                      B) \$1.40                      C) \$1.25                      D) \$1.12

Answer: A

Diff: 3      Page Ref: 265

Topic: Stocks

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 20) On a balance sheet

- A) total assets must equal total liabilities plus equity.
- B) total assets plus equity must equal total liabilities.
- C) total assets plus total liabilities must equal zero.
- D) total assets plus total liabilities plus equity must equal zero.

Answer: A

Diff: 2      Page Ref: 267

Topic: Balance Sheet

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 21) The price of a financial asset should be equal to

- A) the face value of the asset.
- B) the present value of the sum of the coupon payments and the interest rate.
- C) the face value of the asset divided by the interest rate.
- D) the present value of payments to be received from owning that asset.

Answer: D

Diff: 2      Page Ref: 261

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 22) How much is a bond that pays \$20 in coupon payments for 4 years and \$1,000 at the end of the fourth year worth if the interest rate is 5%?

A) \$822.70                      B) \$893.62                      C) \$1,070.92                      D) \$1,080

Answer: B

Diff: 2      Page Ref: 264

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 23) Roderick received a \$100 savings bond for his graduation. The bond pays \$100 at maturity, which is in five years. If the interest rate is 6%, the bond has a present value of \$90.09.

Answer: FALSE

Diff: 2      Page Ref: 264

Topic: Present Value

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking

- 24) Net worth and stockholders' equity are both equal to the difference between assets and liabilities.

Answer: TRUE

Diff: 2      Page Ref: 267

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 25) Seth's grandmother gave him a \$50 savings bond for his birthday. The bond pays \$50 at maturity, which is in five years. If the interest rate is 5%, the bond has a present value of \$43.19.

Answer: FALSE

Diff: 2      Page Ref: 266

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 26) Goodwill is listed as an asset on a firm's balance sheet.

Answer: TRUE

Diff: 2      Page Ref: 267

Topic: Financial Statements

Learning Outcome: Micro-9: Discuss the fundamental characteristics of firms.

AACSB: Analytic thinking

- 27) With state and multistate lotteries, winners are typically given the choice between a lump sum payment today or a 20 year series of annuities. How should a winner decide which is better?

Answer: The winner should decide by determining the present value of the multiyear annuity payout and comparing it to the lump sum payment. Whichever has the largest present value is the best choice.

Diff: 2 Page Ref: 263

Topic: Present Value

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 28) Suppose you hit a progressive jackpot on a slot machine in a casino in Atlantic City and are given the choice of the following prizes:

Prize 1: \$150,000 to be received right away, with three additional payments of \$150,000 to be received each year for the next three years.

Prize 2: \$500,000 to be received right away.

If the interest rate is 5 percent, what is the present value of each prize?

Answer: Prize 1: Present value =  $\$150,000 + [\$150,000 / (1 + 0.05)] + [\$150,000 / (1 + 0.05)^2] + [\$150,000 / (1 + 0.05)^3] = \$558,487.20$

Prize 2: Present value = \$500,000

Diff: 2 Page Ref: 263

Topic: Present Value

Learning Outcome: Macro-5: Describe the key components and functions of a financial system.

AACSB: Analytic thinking



# Chapter 9

## Comparative Advantage and the Gains from International Trade

### 9.1 The United States in the International Economy

- 1) Following the tariff imposed on Chinese tires, some businesspeople correctly argued that the U.S. tariff would result in
- A) China retaliating by raising tariffs on some U.S. exports.
  - B) China halting the sale of all products in the United States.
  - C) U.S. firms never being able to meet the demand for U.S.-produced tires.
  - D) the government demanding price cuts from U.S. tire manufacturers.

Answer: A

Diff: 1 Page Ref: 271

Topic: Trade Restrictions

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 2) Workers in industries protected by tariffs and quotas are likely to support these trade restrictions because
- A) they do not want to offend their employers who want them.
  - B) politicians lobby to convince workers the restrictions will make them better off.
  - C) they believe the restrictions will protect their jobs.
  - D) they don't understand that the restrictions will threaten their jobs.

Answer: C

Diff: 1 Page Ref: 271

Topic: Trade Restrictions

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 3) The intention of the U.S. tariff on Chinese tires was to
- A) protect jobs in the U. S. tire industry.
  - B) protect infant industries in tire U.S. tire market.
  - C) insure that Chinese tires meet U.S. quality and safety standards.
  - D) save the government money by restricting the sale of more expensive Chinese-made tires.

Answer: A

Diff: 1 Page Ref: 271

Topic: Trade Restrictions

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 4) In the 1930s, the United States charged an average tariff rate \_\_\_\_\_. Today, the rate is \_\_\_\_\_.

A) of 100 percent; 20 percent  
 B) above 50 percent; less than 1.5 percent  
 C) of less than 10 percent; over 40 percent  
 D) of 17 percent; 33 percent

Answer: B

Diff: 1 Page Ref: 272

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 5) A tariff is a tax imposed by a government on

A) exports. B) services. C) imports. D) luxury items.

Answer: C

Diff: 1 Page Ref: 272

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 6) Goods and services bought domestically but produced in other countries are referred to as

A) exports. B) imports.  
 C) transfer payments. D) foreign consumption.

Answer: B

Diff: 1 Page Ref: 272

Topic: Imports

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 7) Exports are domestically produced goods and services

A) sold to other countries.  
 B) sold to the government.  
 C) sold at home.  
 D) which are used to produce other goods and services.

Answer: A

Diff: 1 Page Ref: 272

Topic: Exports

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 8) When Roxanne, a U.S. citizen, purchases a designer dress from Barneys of New York that was made in Milan, the purchase is

A) both a U.S. and an Italian import.  
 B) a U.S. import and an Italian export.  
 C) a U.S. export and an Italian import.  
 D) neither an export nor an import for either country.

Answer: B

Diff: 1 Page Ref: 272

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 9) When BMW, an German company, purchases a welding machine that was made in Toronto, the purchase is
- A) both a German and a Canadian import.
  - B) a German import and a Canadian export.
  - C) a German export and a Canadian import.
  - D) neither an export nor an import for either country.

Answer: B

Diff: 1 Page Ref: 272

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 10) Which of the following statements about the importance of trade to the U.S. economy is *true*?
- A) Since 1950, both exports and imports have steadily decreased as a fraction of U.S. gross domestic product.
  - B) Overall, about 80 percent of U.S. manufacturing jobs depend directly or indirectly on exports.
  - C) The United States is the second largest exporter in the world.
  - D) The U.S. economy is highly dependent on international trade for growth in its gross domestic product.

Answer: C

Diff: 1 Page Ref: 274

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 11) In 2012, the largest exporter in the world was
- A) Japan.
  - B) Germany.
  - C) China.
  - D) the United States.

Answer: C

Diff: 1 Page Ref: 274

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 12) In 2013, \_\_\_\_\_ of Goodyear's sales were outside North America.
- A) only 11 percent
  - B) more than 60 percent
  - C) less than half
  - D) 95 percent

Answer: B

Diff: 1 Page Ref: 273–274

Topic: Exports

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 13) Goodyear's sales were negatively affected by the tariff on Chinese tires because
- A) Goodyear operates factories in China, and some of the tires produced there were exported to the United States and subject to the tariff.
  - B) China retaliated and imposed a tariff on Goodyear tires exported to China.
  - C) despite being a U.S. company, all of Goodyear's tires are produced in China.
  - D) the tariff raised the price on Chinese tires, allowing these tires to compete more directly with the more expensive Goodyear tires.

Answer: A

Diff: 1 Page Ref: 273–274

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

14) Which of the following statements is true?

- A) Japan is more dependent on foreign trade than is the United States.
- B) Imports and exports account for over one-half of the GDP of Belgium.
- C) France is the leading exporting country, accounting for 10 percent of total world exports.
- D) Because the cost of labor used on farms is so high, the United States exports very little of its wheat, rice and corn crops.

Answer: B

Diff: 1 Page Ref: 275

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

15) As a percentage of GDP, exports are greater than imports for which of the following countries?

- A) the United Kingdom
- B) France
- C) the United States
- D) China

Answer: D

Diff: 1 Page Ref: 275

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

16) Twenty-seven countries in Europe have eliminated all tariffs with each other. This group of countries is known as the

- A) European Union.
- B) United Federation of Europe.
- C) Gruppo Euro.
- D) European Free Trade Association.

Answer: A

Diff: 1 Page Ref: 272

Topic: Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

17) NAFTA refers to a 1994 agreement that eliminated most tariffs among which countries?

- A) Canada, the United Kingdom and Mexico
- B) the United States, the United Kingdom and Mexico
- C) the United States, Canada and Mexico
- D) the United States, Mexico and Cuba

Answer: C

Diff: 1 Page Ref: 272

Topic: Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 18) Today, the United States charged an average tariff rate
- A) that is more than its average tariff rate in 1930.
  - B) which is greater than any other high-income country.
  - C) of less than 2 percent.
  - D) that exceeds 50 percent.

Answer: C

Diff: 1 Page Ref: 272

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 19) Which of the following statements is true?

- A) Exports benefit trading countries because exports create jobs. Imports do not benefit trading countries because they result in a loss of jobs.
- B) Each year China exports about 50 percent of its wheat crop and 40 percent of its rice crop.
- C) Most of the leading exporting countries are large, high-income countries.
- D) All sectors of the U.S. economy are affected equally by international trade.

Answer: C

Diff: 1 Page Ref: 274

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 20) In the United States, imports and exports make up more than half of GDP.

Answer: FALSE

Diff: 1 Page Ref: 273

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 21) Each year, the U.S. exports about 50 percent of its wheat crop.

Answer: TRUE

Diff: 1 Page Ref: 273

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 22) A tariff is a tax imposed by a government on its own exports.

Answer: FALSE

Diff: 1 Page Ref: 272

Topic: Surplus

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 23) Goodyear's sales are now greater outside the United States than inside the United States.

Answer: TRUE

Diff: 1 Page Ref: 273-274

Topic: Exports

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

24) What is a tariff?

Answer: A tariff is a tax imposed by a government on imports.

Diff: 1 Page Ref: 272

Topic: Tariffs

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

25) What is the difference between imports and exports?

Answer: Imports are goods and services bought domestically but produced in other countries.

Exports are goods and services produced domestically but sold in other countries.

Diff: 1 Page Ref: 272

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

26) How have U.S. imports and exports, as a fraction of GDP, changed from 1970 to the present?

Answer: Since 1950, both exports and imports have been steadily increasing as a fraction of GDP.

In 1970, exports and imports were both less than 6 percent of GDP. In 2012, exports were about 14 percent of GDP and imports were about 18 percent of GDP.

Diff: 1 Page Ref: 273

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

## 9.2 Comparative Advantage in International Trade

1) Absolute advantage is

- A) the ability to produce more of a good or service than competitors when using the same amount of resources.
- B) the ability to produce higher quality goods compared to one's competitors.
- C) the ability to produce a good or service at a higher opportunity cost than one's competitors.
- D) the ability to produce more of a good or service than competitors that have more resources.

Answer: A

Diff: 1 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

2) \_\_\_\_\_ is the ability of an individual, a firm, or a country to produce a good or service at a lower opportunity cost than competitors.

- A) Absolute advantage
- B) Specialization
- C) Autarky
- D) Comparative advantage

Answer: D

Diff: 1 Page Ref: 275

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 9-1**

	<b>Bathing</b>	<b>Grooming</b>
Linda	60	20
Sandy	50	25

Linda and Sandy own The Preppy Puppy, a dog grooming business. Table 9-1 lists the number of dogs Linda and Sandy can each bathe and groom in one week.

- 3) **Refer to Table 9-1.** Select the statement that accurately interprets the data in the table.
- A) Linda has an absolute advantage in dog bathing and Sandy has an absolute advantage in dog grooming.
  - B) Sandy has an absolute advantage in dog bathing and Linda has an absolute advantage in dog grooming.
  - C) Sandy has an absolute advantage in dog bathing and dog grooming.
  - D) Linda has an absolute advantage in dog bathing and dog grooming.

Answer: A

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 4) **Refer to Table 9-1.** Select the statement that accurately interprets the data in the table.
- A) Sandy has a greater opportunity cost than Linda for dog grooming.
  - B) Sandy's opportunity cost for dog grooming is less than Linda's.
  - C) Linda has a greater opportunity cost than Sandy for dog bathing.
  - D) Sandy's opportunity cost for dog grooming and dog bathing are both greater than Linda's.

Answer: B

Diff: 3 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 5) **Refer to Table 9-1.** Select the statement that accurately interprets the data in the table.
- A) Sandy has a comparative advantage in dog grooming.
  - B) Linda has a comparative advantage in dog grooming.
  - C) Linda has a comparative advantage in dog grooming and dog bathing.
  - D) Sandy has a comparative advantage in dog bathing.

Answer: A

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

6) **Refer to Table 9-1.** Select the statement that accurately interprets the data in the table.

- A) Linda has a comparative advantage in dog bathing.
- B) Sandy has an absolute advantage in dog bathing.
- C) Sandy has a comparative advantage in dog bathing.
- D) Linda has a comparative advantage in dog grooming and dog bathing.

Answer: A

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 9-2**

	Pies	Cakes
Sarita	15	25
Gabriel	12	16

Sarita and Gabriel own S&G Bakery. Table 9-2 lists the number of pies and cakes Sarita and Gabriel can each bake in one day.

7) **Refer to Table 9-2.** Select the statement that accurately interprets the data in the table.

- A) Sarita has an absolute advantage in baking cakes and Gabriel has an absolute advantage in baking pies.
- B) Sarita has an absolute advantage in baking pies and Gabriel has an absolute advantage in baking cakes.
- C) Sarita has an absolute advantage in baking pies and cakes.
- D) Gabriel has an absolute advantage in baking pies and cakes.

Answer: C

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

8) **Refer to Table 9-2.** Select the statement that accurately interprets the data in the table.

- A) Sarita has a greater opportunity cost than Gabriel for baking cakes.
- B) Sarita's opportunity cost for baking cakes is less than Gabriel's.
- C) Gabriel has a greater opportunity cost than Sarita for baking pies.
- D) Gabriel's opportunity cost for baking cakes and baking pies are both greater than Sarita's.

Answer: B

Diff: 3 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



9) **Refer to Table 9–2.** Select the statement that accurately interprets the data in the table.

- A) Sarita has a comparative advantage in baking pies.
- B) Gabriel has a comparative advantage in baking cakes.
- C) Sarita has a comparative advantage in baking pies and baking cakes.
- D) Sarita has a comparative advantage in baking cakes.

Answer: D

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

10) **Refer to Table 9–2.** Select the statement that accurately interprets the data in the table.

- A) Sarita has a comparative advantage in baking pies.
- B) Gabriel has an absolute advantage in baking cakes.
- C) Gabriel has a comparative advantage in baking pies.
- D) Gabriel has a comparative advantage in baking pies and baking cakes.

Answer: C

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 9–3**

	Candles	Soap
Bryce	150	450
Tina	200	450

Bryce and Tina are artisans who produce homemade candles and soap. Table 9–3 lists the number of candles and bars of soap Bryce and Tina can each produce in one month.

11) **Refer to Table 9–3.** Select the statement that accurately interprets the data in the table.

- A) Bryce has an absolute advantage in making candles and Tina has an absolute advantage in making soap.
- B) Bryce has an absolute advantage in making soap and Tina has an absolute advantage in making candles.
- C) Bryce has an absolute advantage in making soap.
- D) Tina has an absolute advantage in making candles.

Answer: D

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

12) **Refer to Table 9–3.** Select the statement that accurately interprets the data in the table.

- A) Bryce has an absolute advantage in making candles and soap.
- B) Tina has an absolute advantage in making candles and soap.
- C) Neither Bryce nor Tina has an absolute advantage in making candles.
- D) Neither Bryce nor Tina has an absolute advantage in making soap.

Answer: D

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

13) **Refer to Table 9–3.** Select the statement that accurately interprets the data in the table.

- A) Bryce has a greater opportunity cost than Tina for making candles.
- B) Bryce's opportunity cost for making candles is less than Tina's.
- C) Tina has a greater opportunity cost than Bryce for making candles.
- D) Bryce's opportunity cost for making candles and making soap are both greater than Tina's.

Answer: A

Diff: 3 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

14) **Refer to Table 9–3.** Select the statement that accurately interprets the data in the table.

- A) Tina has a comparative advantage in making soap.
- B) Bryce has a comparative advantage in making soap.
- C) Tina has a comparative advantage in making candles and making soap.
- D) Neither Bryce nor Tina has a comparative advantage in making soap.

Answer: B

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

15) **Refer to Table 9–3.** Select the statement that accurately interprets the data in the table.

- A) Tina has a comparative advantage in making candles.
- B) Bryce has an absolute advantage in making soap.
- C) Bryce has a comparative advantage in making candles.
- D) Bryce has a comparative advantage in making candles and making soap.

Answer: A

Diff: 3 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 16) An economic principle that explains why countries produce different goods and services is
- A) absolute advantage.
  - B) trade as a percentage of GDP.
  - C) comparative advantage.
  - D) NAFTA.

Answer: C

Diff: 1 Page Ref: 275

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 17) Assume that China has a comparative advantage in producing corn and exports corn to Japan. We can conclude that

- A) China also has an absolute advantage in producing corn relative to Japan.
- B) China has a lower opportunity cost of producing corn relative to Japan.
- C) Japan has an absolute disadvantage in producing corn relative to China.
- D) Labor costs are higher for corn producers in Japan than in China.

Answer: B

Diff: 2 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 18) Assume that Bulgaria has a comparative advantage in producing sandals and Finland imports sandals from Bulgaria. We can conclude that

- A) Bulgaria also has an absolute advantage in producing sandals relative to Finland.
- B) Bulgaria has a lower opportunity cost of producing sandals relative to Finland.
- C) Finland has an absolute disadvantage in producing sandals relative to Bulgaria.
- D) Labor costs are higher for sandal producers in Finland than in Bulgaria.

Answer: B

Diff: 2 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 19) Whenever a buyer and a seller agree to trade,
- A) the agreement is made based on absolute advantage.
  - B) they must have identical opportunity costs in producing their respective products.
  - C) one party will always be worse off.
  - D) both must believe they will be made better off.

Answer: D

Diff: 1 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 20) If Japanese workers are more productive than French workers then trade between Japan and France
- A) can take place only if France has an absolute advantage in producing a good or service Japanese buyers want.
  - B) cannot take place because Japanese goods and services will be less expensive than French goods and services.
  - C) cannot take place until French workers become more productive.

D) will take place so long as each country has a comparative advantage in a good or service that buyers in the other country want.

Answer: D

Diff: 1 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

21) If the opportunity cost of production for two goods is different between two countries, then

- A) trade cannot benefit either country.
- B) only one country can be made better off by trade.
- C) mutually beneficial trade is possible.
- D) trade will only benefit both countries if one can lower its opportunity costs.

Answer: C

Diff: 1 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

22) If Canada has a comparative advantage relative to Mexico in the production of timber, then

- A) the explicit cost of production for timber is lower in Canada than in Mexico.
- B) the opportunity cost of production for timber is lower in Canada than in Mexico.
- C) the implicit costs of production for timber are lower in Canada than in Mexico.
- D) the average cost of production for timber is lower in Canada than in Mexico.

Answer: B

Diff: 1 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

23) If Canada imports fishing poles from Mexico and Mexico imports bacon from Canada, which of the following would explain this pattern of trade?

- A) Mexico has a lower opportunity cost of producing bacon than Mexico and Mexico has a comparative advantage in producing fishing poles.
- B) The opportunity cost of producing fishing poles in Canada is higher than the opportunity cost of producing bacon in Mexico.
- C) Mexico must have an absolute advantage in producing fishing poles and Canada must have an absolute advantage in bacon.
- D) Mexico has a higher opportunity cost of producing fishing poles than Canada, and Canada has a higher opportunity cost of producing bacon.

Answer: B

Diff: 2 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 24) The ability of a firm or country to produce a good or service at a lower opportunity cost than other producers is called absolute advantage.

Answer: FALSE

Diff: 2 Page Ref: 275

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 25) If a country has an absolute advantage in producing a product, it must also have a comparative advantage in producing that product.

Answer: FALSE

Diff: 2 Page Ref: 275

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 26) If a country has a comparative advantage in producing a product, it may not have an absolute advantage in producing that product.

Answer: TRUE

Diff: 2 Page Ref: 275

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 27) If Estonia has an absolute advantage in the production of two goods compared to Norway, Estonia can not benefit from trade with Norway.

Answer: FALSE

Diff: 1 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 28) What does it mean for a country to have an absolute advantage in producing a product?

Answer: A country has an absolute advantage in producing a product when it has the ability to produce more of that product than competitors when using the same amount of resources.

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 29) Explain whether it is possible for a country to have an absolute advantage in the production of a product without having a comparative advantage in the production of that product.

Answer: A country can have an absolute advantage without having a comparative advantage in the production of a product, because having an absolute advantage means a country can produce more of the product than another country while using the same amount of resources, and having a comparative advantage means that the country can produce the product at a lower opportunity cost than another country. Having a comparative advantage is not required to have an absolute advantage.

Diff: 2 Page Ref: 276

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Table 9-4

**Output Per Hour of Work**

	Handbags	Jackets
Cambodia	15	3
Thailand	24	6

Table 9-4 shows the output per hour of work for handbags and jackets in Cambodia and in Thailand.

- 30) Refer to Table 9-4. Fill in the following table with the opportunity costs of producing handbags and jackets for Cambodia and Thailand.

	Handbags	Jackets
Cambodia		
Thailand		

Answer:

	Handbags	Jackets
Cambodia	0.20	5
Thailand	0.25	4

Diff: 2 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 31) Refer to Table 9-4.

- Which country has an absolute advantage in the production of handbags and jackets?
- Which country has a comparative advantage in the production of handbags?
- Which country has a comparative advantage in the production of jackets?

Answer: a. Thailand has an absolute advantage in the production of both products.

b. Cambodia has a comparative advantage in the production of handbags.

c. Thailand has a comparative advantage in the production of jackets.

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

Table 9-5

	Bows	Arrows
Ahmet	20	80
MyLinh	25	75

Table 9-5 shows the output per week for bows and arrows by Ahmet and MyLinh.

- 32) **Refer to Table 9–5.** Fill in the following table with the opportunity costs of producing bows and arrows for Ahmet and MyLinh.

	Bows	Arrows
Ahmet		
MyLinh		

Answer:

	Bows	Arrows
Ahmet	4	0.25
MyLinh	3	0.33

Diff: 2 Page Ref: 276

Topic: Opportunity Cost

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 33) **Refer to Table 9–5.**

- Which person has an absolute advantage in the production of bows? arrows?
- Which person has a comparative advantage in the production of bows?
- Which person has a comparative advantage in the production of arrows?

Answer: a. MyLinh has an absolute advantage in the production of bows and Ahmet has an absolute advantage in the production of arrows.

b. MyLinh has a comparative advantage in the production of bows.

c. Ahmet has a comparative advantage in the production of arrows.

Diff: 2 Page Ref: 276

Topic: Absolute Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

### 9.3 How Countries Gain from International Trade

- A situation in which a country does not trade with other countries is called
  - autarky.
  - self-actualization.
  - autonomy.
  - independence.

Answer: A

Diff: 1 Page Ref: 277

Topic: Autarky

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- The ratio at which a country can trade its exports for imports from other countries is called
  - a trade barrier.
  - the terms of trade.
  - autarky.
  - a free trade agreement.

Answer: B

Diff: 1 Page Ref: 277

Topic: Trade

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 3) Countries that engage in trade will tend to specialize in the production of goods and services in which they have \_\_\_\_\_ and will \_\_\_\_\_ these goods and services.
- A) a comparative advantage; import      B) an absolute advantage; export  
C) a comparative advantage; export      D) an absolute advantage; import

Answer: C

Diff: 1      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 4) Examples of \_\_\_\_\_ show how trade between two countries can make each better off.
- A) absolute advantage      B) comparative advantage  
C) autarky      D) trade barriers

Answer: B

Diff: 1      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

**Table 9-6**

	Production and Consumption Without Trade			Production With Trade	
	Clocks	Hats		Clocks	Hats
Denmark	900	150		1,200	0
Belize	150	100		0	400

Denmark and Belize can produce both clocks and hats. Table 9-6 shows the production and consumption quantities without trade, and the production numbers with trade.

- 5) *Refer to Table 9-6.* Which country has an absolute advantage in producing clocks?
- A) Denmark      B) Belize  
C) both countries      D) neither country

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 6) *Refer to Table 9-6.* Which country has an absolute advantage in producing hats?
- A) Denmark      B) Belize  
C) both countries      D) neither country

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



7) **Refer to Table 9–6.** Which country has a comparative advantage in producing clocks?

- A) Denmark  
B) Belize  
C) both countries  
D) neither country

Answer: A

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

8) **Refer to Table 9–6.** Which country has a comparative advantage in producing hats?

- A) Denmark  
B) Belize  
C) both countries  
D) neither country

Answer: B

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

9) **Refer to Table 9–6.** Prior to trade, what was the opportunity cost to produce 1 hat in Denmark?

- A) 1/6 of a clock  
B) 2/3 of a clock  
C) 1.5 clocks  
D) 6 clocks

Answer: D

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

10) **Refer to Table 9–6.** Prior to trade, what was the opportunity cost to produce 1 hat in Belize?

- A) 1/6 of a clock  
B) 2/3 of a clock  
C) 1.5 clocks  
D) 6 clocks

Answer: C

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

11) **Refer to Table 9–6.** Prior to trade, what was the opportunity cost to produce 1 clock in Denmark?

- A) 1/6 of a hat  
B) 2/3 of a hat  
C) 1.5 hats  
D) 6 hats

Answer: A

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

12) **Refer to Table 9–6.** Prior to trade, what was the opportunity cost to produce 1 clock in Belize?

- A) 1/6 of a hat  
B) 2/3 of a hat  
C) 1.5 hats  
D) 6 hats

Answer: B

Diff: 2 Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 13) **Refer to Table 9–6.** With trade, what is the total gain in hat production?

A) 150                      B) 300                      C) 400                      D) 650

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 14) **Refer to Table 9–6.** With trade, what is the total gain in clock production?

A) 150                      B) 300                      C) 2,100                      D) 2,250

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 15) **Refer to Table 9–6.** All of the following are terms of trade that could possibly benefit both countries *except*

A) 1 hat : 2 clocks              B) 1 hat : 4 clocks              C) 1 hat : 5 clocks              D) 1 hat : 8 clocks

Answer: D

Diff: 3      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 16) **Refer to Table 9–6.** All of the following are terms of trade that could possibly benefit both countries *except*

A) 1/5 of a hat : 1 clock              B) 1/3 of a hat : 1 clock  
C) 1/2 of a hat : 1 clock              D) 3/4 of a hat : 1 clock

Answer: D

Diff: 3      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 17) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many hats will Denmark consume?

A) 150                      B) 180                      C) 270                      D) 400

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 18) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many hats will Belize consume?

A) 100                      B) 130                      C) 250                      D) 400

Answer: C

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 19) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many clocks will Denmark consume?

A) 270                      B) 900                      C) 930                      D) 1,200

Answer: C

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 20) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many clocks will Belize consume?

A) 150                      B) 270                      C) 930                      D) 1,200

Answer: B

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 21) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many hats will Denmark gain compared to the "without trade" numbers?

A) –150                      B) 0                      C) 150                      D) 1,050

Answer: B

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 22) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many hats will Belize gain compared to the "without trade" numbers?

A) –100                      B) 0                      C) 150                      D) 250

Answer: C

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 23) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many clocks will Denmark gain compared to the "without trade" numbers?
- A) 30                                      B) 100                                      C) 150                                      D) 900

Answer: A

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 24) **Refer to Table 9–6.** If the actual terms of trade are 1 hat for 1.8 clocks and 150 hats are traded, how many clocks will Belize gain compared to the "without trade" numbers?
- A) –100                                      B) 100                                      C) 120                                      D) 250

Answer: C

Diff: 2      Page Ref: 277

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 25) The first example used to explain comparative advantage used two countries (England and Portugal) and two goods (wine and cloth) to show that
- A) each country would be better off from trade if it had an absolute advantage in producing one of the goods.
- B) each country would have a comparative advantage in the production of the good for which it had an absolute advantage.
- C) mutually beneficial trade was possible between two countries even if one had an absolute advantage in the production of both goods.
- D) mutually beneficial trade was possible between two countries even if one had a comparative advantage in the production of both goods.

Answer: C

Diff: 2      Page Ref: 278–279

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 26) In the real world we don't observe countries completely specializing in the production of goods for which they have a comparative advantage. One reasons for this is
- A) comparative advantage works better in theory than in practice.
- B) some countries have more resources than other countries.
- C) tastes for many traded goods are similar in many countries because of globalization.
- D) production of most goods involves increasing opportunity costs.

Answer: D

Diff: 2      Page Ref: 280

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

27) Tastes for products such as beer differ. As a result

- A) we see countries specializing completely in the production of beer.
- B) consumers of beer have difficulty deciding what type of imported beer to buy.
- C) the quality of imported beer is less than it could be.
- D) different countries may each have a comparative advantage in producing different types of beer.

Answer: D

Diff: 2 Page Ref: 280

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

28) A consequence of increasing marginal costs of producing digital music players in Japan is

- A) Japan will not export digital music players.
- B) Japan will stop short of complete specialization in the production of digital music players.
- C) Japan will import digital music players from countries that don't experience increasing marginal costs.
- D) Japan will likely impose trade restrictions on imported digital music players.

Answer: B

Diff: 2 Page Ref: 280

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

29) Which of the following statements is *true*?

- A) All individuals in both countries are made better off as a result of international trade.
- B) Within each country, some individuals are made better off as a result of international trade, but one of the countries will be worse off overall.
- C) Although some individuals are made better off as a result of international trade, both countries may be made worse off overall.
- D) Each country as a whole is made better off as a result of international trade, but individuals within each country may be made worse off.

Answer: D

Diff: 2 Page Ref: 280–281

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

30) A Federal Reserve publication proclaimed that "Trade is a win-win situation for all countries that participate." This statement is

- A) false since it ignores the workers who lose their jobs as result of international trade.
- B) false since not all countries participate in international trade.
- C) true because it refers to countries; individuals may be losers as a result of international trade.
- D) true because all consumers and workers benefit from international trade.

Answer: C

Diff: 1 Page Ref: 280

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

31) Which of the following is *not* a source of comparative advantage?

- A) relative abundance of labor and capital
- B) technology
- C) climate and natural resources
- D) a strong foreign currency exchange rate

Answer: D

Diff: 1 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

32) Japan has developed a comparative advantage in designing and producing automobiles. The source of its comparative advantage in these products is

- A) abundant supplies of natural resources.
- B) a favorable climate.
- C) a strong central government.
- D) technology.

Answer: D

Diff: 1 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

33) China has developed a comparative advantage in the production of clothing. The source of this comparative advantage is

- A) a large supply of natural resources.
- B) a large supply of unskilled workers and relatively little capital.
- C) investment in capital used to produce clothing.
- D) superior process technology.

Answer: B

Diff: 2 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

34) The United States has developed a comparative advantage in film production due to the film industry being long-established in southern California, and lower costs result from the size of the industry in the area. This source of comparative advantage is referred to as

- A) the abundance of natural resources.
- B) superior process technology.
- C) external economies.
- D) best practices of unskilled labor.

Answer: C

Diff: 2 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 35) \_\_\_\_\_ refers to reductions in a firm's costs that result from an increase in the size of an industry.

A) Internal economies  
 B) External economies  
 C) Autarkial dominance  
 D) Streamlining

Answer: B

Diff: 2 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 36) Once a country has lost its comparative advantage in producing a good, its income will be \_\_\_\_\_ and its economy will be \_\_\_\_\_ if it switches from producing the good to importing it.

A) higher; less efficient  
 B) higher; more efficient  
 C) lower; less efficient  
 D) lower; more efficient

Answer: B

Diff: 2 Page Ref: 283

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 37) Wall Street, in the borough of Manhattan in New York City, is the heart of the U.S. financial system, where banks, brokerage houses, other financial firms, and the New York Stock Exchange are all located. What is the reason for New York City's comparative advantage in the financial market?

A) the development of superior information technology  
 B) an abundant supply of skilled labor  
 C) New York City has one of the largest sea ports in the world.  
 D) external economies

Answer: D

Diff: 2 Page Ref: 282

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 38) The United States is a leading exporter of wheat. What explains the comparative advantage of the United States in wheat production?

A) positive externalities  
 B) investment by multinational firms such as Archer-Daniels-Midland and the Tyson Foods Inc.  
 C) climate and soil conditions in the United States which are well-suited for wheat production  
 D) a large supply of unskilled labor

Answer: C

Diff: 1 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 39) In the 1970s and 1980s, the United States lost its comparative advantage in consumer electronics goods to Japan. What factor was most responsible for the development of Japan's comparative advantage in consumer electronics goods?

A) Japanese firms benefited from external economies.  
 B) Japan has abundant supplies of labor.  
 C) Japanese firms excelled in process technology.  
 D) Japan has abundant supplies of natural resources needed to produce electronics goods.

Answer: C

Diff: 2 Page Ref: 283

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 40) One reason a country does not specialize completely in production is that not all goods and services are traded internationally.

Answer: TRUE

Diff: 1 Page Ref: 280

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 41) Trade only occurs if there are only winners, and no losers, as a result of the trade.

Answer: FALSE

Diff: 1 Page Ref: 280

Topic: Trade

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 42) One of the main sources of comparative advantage is internal economies.

Answer: FALSE

Diff: 1 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 43) Once a country has a comparative advantage in producing a product, it cannot lose that advantage.

Answer: FALSE

Diff: 1 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 44) What is autarky?

Answer: Autarky is a situation in which a country does not trade with other countries.

Diff: 2 Page Ref: 277

Topic: Autarky

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



- 45) The simple trade model demonstrates that countries can expand consumption by specializing in the production of goods and services in which they have a comparative advantage. In reality we do not see complete specialization in production. State three reasons why this is case.

Answer: Three reasons outlined in the text are:

1. Not all goods and services are traded internationally.
2. As more exported goods are produced, the opportunity cost of producing additional units eventually increases.
3. Since most products are differentiated some buyers prefer to purchase domestically produced products while others will prefer to buy similar products produced abroad. The automobile industry is a good example of this.

*Diff: 3 Page Ref: 280*

*Topic: Trade*

*Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.*

*AACSB: Analytic thinking*

- 46) What are the four main sources of comparative advantage? Briefly explain each source and provide examples.

Answer: The 4 main sources cited are:

1. climate and natural resources
2. relatively abundant supplies of labor and capital
3. technology
4. external economies.

Some examples of natural resource rich countries include Saudi Arabia (rich in oil), Malaysia (rich in palm oil), Indonesia (rich in tropical hardwoods), and Kenya with its exotic wildlife (for tourism). Advantageous climate is also a source of comparative advantage. For example, the South of France and certain parts of Italy have a particular blend of climatic conditions and land that is well suited to the cultivation of truffles.

Countries like the United States have many highly skilled workers and a huge stock of capital equipment compared to, say, China and India which have more low-skilled workers and relatively little machinery. As a result, the United States has a comparative advantage in the production of goods that require skilled workers or sophisticated machinery (software, biotechnology) while China and India have a comparative advantage in the production of goods that require low-skilled workers and small amounts of simple machinery (carpets, clothing items).

The text discusses the distinction between product technologies and process technologies and how they lead to specialization in different kinds of products. For example, the United States is undoubtedly the world leader in research and development leading to a comparative advantage in technology-intensive products and services. Examples include the development of new products in the field of medicine, telecommunications and bioengineering. Countries that are strong in process technologies are likely to concentrate on improving the process used to make existing products.

External economies occur outside of a firm, within an industry. Thus, when an industry's scope of operations expands due to, for example, the creation of a better transportation network, firms located in that network gain advantages over firms located outside the network.

Diff: 3 Page Ref: 281

Topic: Comparative Advantage

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 47) Suppose in Finland a worker can produce either 32 cell phones or 4 kayaks while in Canada a worker can produce either 40 cell phones or 10 kayaks.
- Which country has an absolute advantage in cell phone production? In kayak production?
  - What is the opportunity cost of 1 cell phone in Finland? In Canada?
  - What is the opportunity cost of 1 kayak in Finland? In Canada?
  - Which country has a comparative advantage in cell phone production? In kayak production?
  - Suppose each country has 1,000 workers. Currently, each country devotes 40 percent of its labor force to cell phone production and 60 percent to kayak production. What is the output of cell phones and kayaks for each country and what is the total output of cell phones and kayaks between the two countries?
  - Suppose each country specializes in the production of the good in which it has a comparative advantage. What is the total output of cell phones and kayaks in the two countries?
  - Provide a numerical example to show how Finland and Canada can both gain from trade. Assume that the terms of trade are established at 6 cell phones for 1 kayak.

Answer:

- Answer:
- Canada has an absolute advantage in the production of both goods.
  - In Finland, the opportunity cost of 1 cell phone =  $1/8$  kayak. In Canada, the opportunity cost of 1 cell phone =  $1/4$  kayak.
  - In Finland, the opportunity cost of 1 kayak = 8 cell phones. In Canada, the opportunity cost of 1 kayak = 4 cell phones.
  - Finland has a comparative advantage in cell phone production and Canada in kayak production.
  -

	Cell Phones	Kayaks
Finland	$400 \times 32 = 12,800$	$600 \times 4 = 2,400$
Canada	$400 \times 40 = 16,000$	$600 \times 10 = 6,000$
Total	28,800	8,400

- f. If each country specializes, output is:

	Cell Phones	Kayaks
Finland	$1,000 \times 32 = 32,000$	
Canada		$1,000 \times 10 = 10,000$
Total	32,000	10,000

- g.

Finland	
Output	32,000 cell phones
Exports	18,000 cell phones
Consumes	14,000 cell phones
Imports	3,000 kayaks

Canada	
Output	10,000 kayaks
Exports	3,000 kayaks
Consumes	7,000 kayaks
Imports	18,000 cell phones

Diff: 3 Page Ref: 278–279

Topic: Comparative Advantage

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

## 9.4 Government Policies That Restrict International Trade

- 1) Trade between countries that is without restrictions is called
- unobstructed commerce.
  - unabated trade.
  - free trade.
  - unencumbered trade.

Answer: C

Diff: 1 Page Ref: 283

Topic: Trade

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

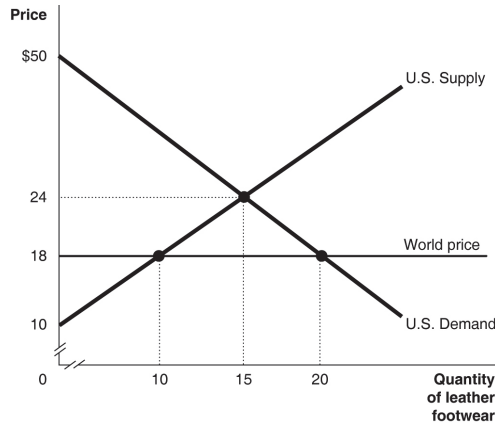
**Figure 9-1**

Figure 9-1 shows the U.S. demand and supply for leather footwear.

- 2) **Refer to Figure 9-1.** Under autarky, the consumer surplus is  
 A) \$195.                      B) \$260.                      C) \$300.                      D) \$555.

Answer: A

Diff: 3      Page Ref: 284

Topic: Autarky

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 3) **Refer to Figure 9-1.** Under autarky, the producer surplus is  
 A) \$40                      B) \$105                      C) \$195                      D) \$285

Answer: B

Diff: 3      Page Ref: 284

Topic: Autarky

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 4) **Refer to Figure 9-1.** Under autarky, the deadweight loss is  
 A) \$0.                      B) \$15.                      C) \$30.                      D) \$40.

Answer: A

Diff: 3      Page Ref: 284

Topic: Autarky

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 5) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. What will the market price be?  
 A) \$10                      B) \$18                      C) \$24                      D) >\$24

Answer: B

Diff: 2      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 6) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. What will be the quantity demanded?  
 A) 5 units                      B) 10 units                      C) 15 units                      D) 20 units

Answer: D

Diff: 2      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 7) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. What will be the domestic quantity supplied?  
 A) 5 units                      B) 10 units                      C) 15 units                      D) 20 units

Answer: B

Diff: 2      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 8) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. What will be the quantity of imports?  
 A) 5 units                      B) 10 units                      C) 15 units                      D) 20 units

Answer: B

Diff: 2      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 9) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. The market price falls to \$18. What is the value of domestic producer surplus?  
 A) \$0.                      B) \$40.                      C) \$320.                      D) \$360.

Answer: B

Diff: 3      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

- 10) **Refer to Figure 9-1.** Suppose the government allows imports of leather footwear into the United States. The market price falls to \$18. What is the value of consumer surplus?  
 A) \$0                      B) \$270                      C) \$305                      D) \$320.

Answer: D

Diff: 3      Page Ref: 284

Topic: Trade

Learning Outcome: Micro-8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

11) Which of the following is *not* an example of a trade restriction?

- A) tariffs
- B) quotas and voluntary export restraints
- C) legislation requiring that cars sold in a country have a 50 percent domestic content
- D) consumer preferences for goods produced domestically

Answer: D

Diff: 1 Page Ref: 285–286

Topic: Trade Restrictions

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

12) Under autarky, consumer surplus is represented by the area

- A) above the supply curve and below the equilibrium price.
- B) above the supply curve and below the demand curve.
- C) below the demand curve and above the equilibrium price.
- D) above the demand curve and below the supply curve.

Answer: C

Diff: 1 Page Ref: 284

Topic: Autarky

Learning Outcome: Micro–8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

13) Under autarky, domestic producer surplus is represented by the area

- A) above the supply curve and below the equilibrium price.
- B) above the supply curve and below the demand curve.
- C) below the demand curve and above the equilibrium price.
- D) above the demand curve and below the supply curve.

Answer: A

Diff: 1 Page Ref: 284

Topic: Autarky

Learning Outcome: Micro–8: Describe how supply, demand, and other forces influence international trade.

AACSB: Analytic thinking

14) A tariff is

- A) a limit placed on the quantity of goods that can be imported into a country.
- B) a tax imposed by a government on goods imported into a country.
- C) a subsidy granted to importers of a vital input.
- D) a health and safety restriction imposed on an imported product.

Answer: B

Diff: 1 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 15) A numerical limit imposed by a government on the quantity of a good that can be imported into the country is called a
- A) tariff.                      B) quota.                      C) quantity floor.                      D) barricade.

Answer: B

Diff: 1      Page Ref: 286

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 16) Which of the following is the best example of a tariff?
- A) a subsidy from the U.S. government to domestic manufacturers of residential air conditioners to enable them to compete more effectively with foreign producers
- B) a limit on the quantity of residential air conditioners that can be imported from a foreign country
- C) a \$150 fee imposed on all imported residential air conditioners
- D) a tax placed on all residential air conditioners sold in the domestic market to help offset the impact of emissions on the environment

Answer: C

Diff: 1      Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 17) Which of the following is the best example of a quota?
- A) a subsidy from the U.S. government to domestic manufacturers of tires to enable them to compete more effectively with foreign producers
- B) a limit on the quantity of tires that can be imported from a foreign country
- C) a 40% fee imposed on all imported tires
- D) a tax placed on all tires sold in the domestic market to help offset the impact of lost jobs in the domestic tire industry.

Answer: B

Diff: 1      Page Ref: 285

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 18) A tariff
- A) makes domestic consumers worse off.
- B) makes both domestic producers and consumers worse off.
- C) makes everyone better off.
- D) makes domestic producers worse off.

Answer: A

Diff: 1      Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

19) A quota

- A) makes domestic consumers better off.
- B) makes both domestic producers and consumers better off.
- C) makes everyone worse off.
- D) makes domestic producers better off.

Answer: D

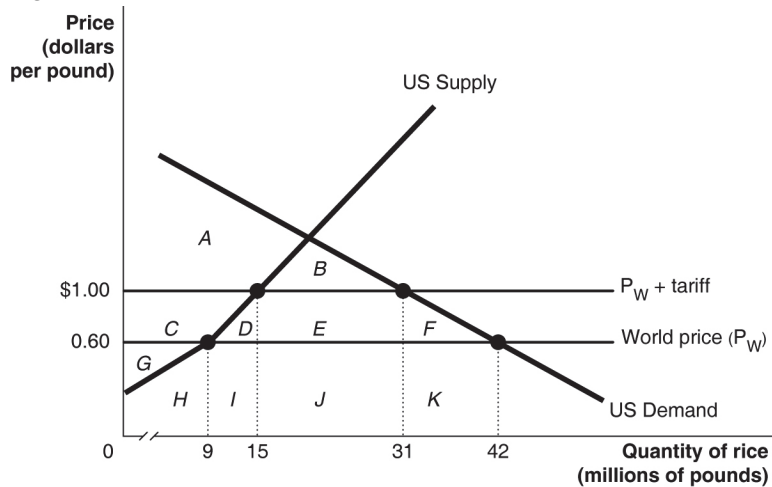
Diff: 1 Page Ref: 285

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 9-2



Suppose the U.S. government imposes a \$0.40 per pound tariff on rice imports. Figure 9-2 shows the impact of this tariff.

20) Refer to Figure 9-2. The tariff revenue collected by the government equals the area

- A)  $D + E + F$ .
- B)  $E$ .
- C)  $B + D + E + F$ .
- D)  $C + D + E + F$ .

Answer: B

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

21) Refer to Figure 9-2. Without the tariff in place, the United States consumes

- A) 9 million pounds of rice.
- B) 15 million pounds of rice.
- C) 31 million pounds of rice.
- D) 42 million pounds of rice.

Answer: D

Diff: 1 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking



22) **Refer to Figure 9-2.** Without the tariff in place, the United States produces

- A) 9 million pounds of rice.
- B) 15 million pounds of rice.
- C) 31 million pounds of rice.
- D) 42 million pounds of rice.

Answer: A

Diff: 1 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

23) **Refer to Figure 9-2.** With the tariff in place, the United States consumes

- A) 9 million pounds of rice.
- B) 15 million pounds of rice.
- C) 31 million pounds of rice.
- D) 42 million pounds of rice.

Answer: C

Diff: 1 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

24) **Refer to Figure 9-2.** With the tariff in place, the United States produces

- A) 9 million pounds of rice.
- B) 15 million pounds of rice.
- C) 31 million pounds of rice.
- D) 42 million pounds of rice.

Answer: B

Diff: 1 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

25) **Refer to Figure 9-2.** With the tariff in place, the United States

- A) imports 16 million pounds of rice.
- B) imports 9 million pounds of rice.
- C) imports 15 million pounds of rice.
- D) exports 31 million pounds of rice.

Answer: A

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

26) **Refer to Figure 9-2.** As a result of the tariff, domestic producers increase their quantity supplied by

- A) 31 million pounds of rice.
- B) 22 million pounds of rice.
- C) 15 million pounds or rice.
- D) 6 million pounds of rice.

Answer: D

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 27) **Refer to Figure 9-2.** The increase in domestic producer surplus as a result of the tariff is equal to the area

A) C. B) C + G.  
C) A + C + G. D) C + D + G + H + I.

Answer: A

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 28) **Refer to Figure 9-2.** The tariff causes domestic consumption of rice

A) to fall by 27 million pounds. B) to fall by 11 million pounds.  
C) to rise by 6 million pounds. D) to rise by 16 million pounds.

Answer: B

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 29) **Refer to Figure 9-2.** The loss in domestic consumer surplus as a result of the tariff is equal to the area

A) B + D + E + F. B) D + E + F. C) C + D + E + F. D) B.

Answer: C

Diff: 2 Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 30) **Refer to Figure 9-2.** If the tariff was replaced by a quota which limited rice imports to 16 million pounds, the amount of revenue received by rice importers would equal

A) \$6.4 million. B) \$9.6 million. C) \$16 million. D) \$19.8 million.

Answer: C

Diff: 2 Page Ref: 286

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 31) An agreement negotiated by two countries that places a numerical limit on the quantity of a good that can be imported by one country from another country is called

A) a non-tariff trade barrier. B) an export quota.  
C) an import quota. D) a voluntary export restraint.

Answer: D

Diff: 1 Page Ref: 286

Topic: Trade Restrictions

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

32) The main purpose of most tariffs and quotas is to

- A) raise revenue for the government.
- B) reduce the prices consumers pay for goods and services.
- C) reduce the foreign competition that domestic firms face.
- D) improve the quality of goods and services imported into the country.

Answer: C

Diff: 1 Page Ref: 285–286

Topic: Trade Restrictions

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

33) Which of the following is the best example of a quota?

- A) a limit imposed on the number of sport utility vehicles that the United States can import from Japan
- B) a subsidy granted by the U.S. government to domestic garment manufacturers so they can compete more effectively with foreign garment manufacturers
- C) a tax placed on all sport utility vehicles sold in the domestic market
- D) a \$5,000 per-car fee imposed on all sport utility vehicles imported into the United States

Answer: A

Diff: 1 Page Ref: 286

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

34) Which of the following is the best example of a voluntary export restraint?

- A) a limit imposed by the U.S. government on the number of cell phones that the United States can import from Korea
- B) a subsidy granted by the U.S. government to domestic cell phone manufacturers so they can compete more effectively with foreign cell phone manufacturers
- C) a limit set by the Korean government on the number of cell phones that the United States can import from Korea.
- D) a \$50 per-cell phone-fee imposed on all cell phones vehicles imported into the United States

Answer: C

Diff: 1 Page Ref: 286

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

35) In order to avoid the imposition of other types of trade barriers, foreign producers will sometimes agree to voluntary export restraints. With voluntary export restraints, foreign producers

- A) agree to meet specific quality standards required by the importing country.
- B) limit their exports to a country.
- C) pay a tax on all products they export.
- D) must agree to import an equal quantity of products that they export.

Answer: B

Diff: 1 Page Ref: 286

Topic: Non-Tariff Barriers

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 36) The "Buy American" provision in the 2009 stimulus package required that stimulus money be spent only on U.S.-made goods, effectively acting as a quota of zero imports when stimulus money was being spent. In the market for steel, the "Buy American" provision would \_\_\_\_\_ the price of steel in the United States and \_\_\_\_\_ the quantity of steel demanded in the United States.

- A) increase; increase  
B) increase; decrease  
C) decrease; increase  
D) decrease; decrease

Answer: B

Diff: 2 Page Ref: 286–287

Topic: Trade Policies and Globalization

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 37) The "Buy American" provision in the 2009 stimulus package required that stimulus money be spent only on U.S.-made goods, effectively acting as a quota of zero imports when stimulus money was being spent. In the U.S. steel market, a "Buy American" provision in the 2009 stimulus package would

- A) convert some consumer surplus to deadweight loss.  
B) transfer some deadweight loss to producer surplus.  
C) transfer some producer surplus to consumer surplus.  
D) reduce the producer surplus received by foreign manufacturers.

Answer: A

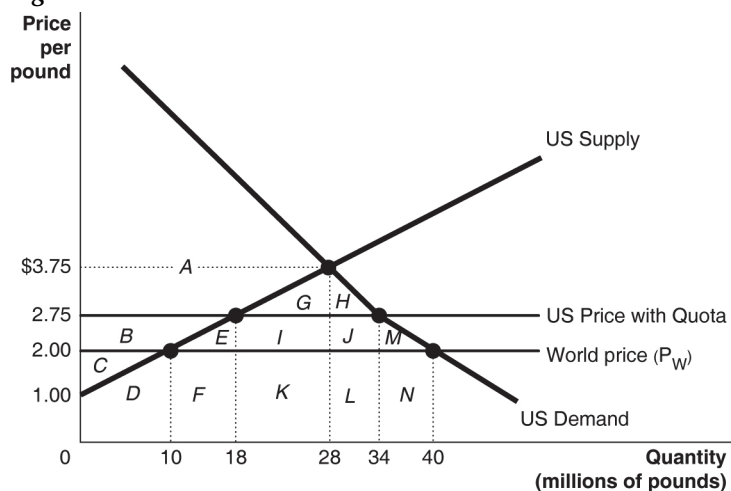
Diff: 2 Page Ref: 286–287

Topic: Trade Policies and Globalization

Learning Outcome: Micro-7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

Figure 9–3



Since 1953 the United States has imposed a quota to limit the imports of peanuts. Figure 9–3 illustrates the impact of the quota.

- 38) **Refer to Figure 9–3.** Without the quota, the domestic price of peanuts equals the world price which is \$2.00 per pound. What is the quantity of peanuts supplied by domestic producers in the absence of a quota?

A) 10 million pounds  
B) 28 million pounds  
C) 30 million pounds  
D) 40 million pounds

Answer: A

Diff: 2 Page Ref: 287–288

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 39) **Refer to Figure 9–3.** If there was no quota, how many pounds of peanuts would domestic consumers purchase?

A) 10 million  
B) 28 million  
C) 34 million  
D) 40 million

Answer: D

Diff: 2 Page Ref: 287–288

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 40) **Refer to Figure 9–3.** If there was no quota, how many pounds of peanuts would be imported?

A) 16 million  
B) 24 million  
C) 30 million  
D) 40 million

Answer: C

Diff: 2 Page Ref: 287–288

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 41) **Refer to Figure 9–3.** What is the area of domestic producer surplus without a quota?

A) C  
B) C + B  
C) A + B + C  
D) A + B + C + D

Answer: A

Diff: 2 Page Ref: 287–288

Topic: Quotas

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

42) **Refer to Figure 9-3.** With a quota in place, what is the quantity consumed in the domestic market?

- |                      |                      |
|----------------------|----------------------|
| A) 10 million pounds | B) 28 million pounds |
| C) 34 million pounds | D) 40 million pounds |

Answer: C

Diff: 2 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

43) **Refer to Figure 9-3.** With a quota in place, what is the quantity supplied by domestic producers?

- |                      |                      |
|----------------------|----------------------|
| A) 8 million pounds  | B) 10 million pounds |
| C) 16 million pounds | D) 18 million pounds |

Answer: D

Diff: 2 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

44) **Refer to Figure 9-3.** What is the area of consumer surplus after the imposition of the quota?

- |                |                            |
|----------------|----------------------------|
| A) $A + G + H$ | B) $G + H + E + I + J + M$ |
| C) $G + H$     | D) $A$                     |

Answer: A

Diff: 1 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

45) **Refer to Figure 9-3.** What is the area of domestic producer surplus after the imposition of a quota?

- |                        |                    |
|------------------------|--------------------|
| A) $B$                 | B) $B + C$         |
| C) $B + E + I + J + M$ | D) $E + I + J + M$ |

Answer: B

Diff: 2 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

46) **Refer to Figure 9-3.** What is the area that represents revenue to foreign producers who are granted permission to sell in the U.S. market when there is a quota?

- |            |                    |                    |                    |
|------------|--------------------|--------------------|--------------------|
| A) $I + J$ | B) $E + I + J + M$ | C) $I + J + K + L$ | D) $G + H + I + J$ |
|------------|--------------------|--------------------|--------------------|

Answer: C

Diff: 2 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

47) Refer to Figure 9-3. What is the area that represents the deadweight loss as a result of the quota?

- A)  $G + H$                       B)  $G + H + I + J$                       C)  $E + I + J + M$                       D)  $E + M$

Answer: D

Diff: 2      Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

48) As a result of the tariff on Chinese tires, U.S. consumers are estimated to have spent \_\_\_\_\_ on imported tires and \_\_\_\_\_ on U.S.-produced tires.

- A) more; more                      B) more; less                      C) less; more                      D) less; less

Answer: A

Diff: 2      Page Ref: 289-290

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

49) A tariff is a numerical limit on the quantity of a good that can be imported.

Answer: FALSE

Diff: 2      Page Ref: 285

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

50) Free trade refers to trade between countries without government restrictions.

Answer: TRUE

Diff: 2      Page Ref: 285

Topic: Trade

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

51) The U.S. economy would gain from the elimination of tariffs and quotas even if other countries do not reduce their tariffs and quotas.

Answer: TRUE

Diff: 2      Page Ref: 290

Topic: Tariffs

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

52) A quota is the same as a voluntary export restraint.

Answer: FALSE

Diff: 2      Page Ref: 290

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

53) Distinguish between a voluntary export restraint and a quota.

Answer: A voluntary export restraint is an agreement negotiated between two countries that places a numerical limit on the quantity of a good that can be imported by one country from the other country. A quota is a numerical limit imposed by the government on the quantity of a good that can be imported into a country.

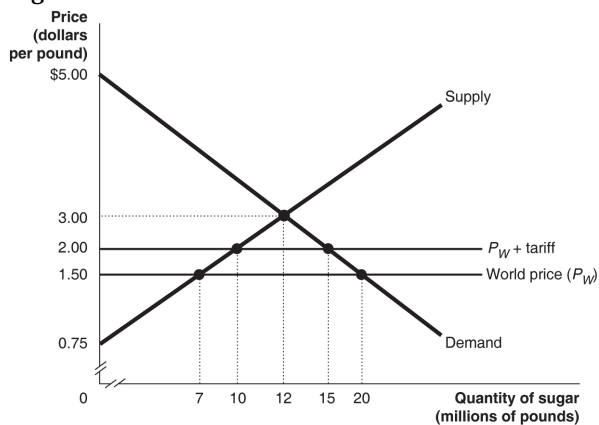
Diff: 3 Page Ref: 286

Topic: Trade Restrictions

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 9-4



Suppose the U.S. government imposes a \$0.50 per pound tariff on sugar imports. Figure 9-4 shows the demand and supply curves for sugar and the impact of this tariff.

54) Use *Figure 9-4* to answer questions a–i.

- Following the imposition of the tariff, what is the price that domestic consumers must now pay and what is the quantity purchased?
- Calculate the value of consumer surplus with the tariff in place.
- What is the quantity supplied by domestic sugar producers with the tariff in place?
- Calculate the value of producer surplus received by U.S. sugar producers with the tariff in place.
- What is the quantity of sugar imported with the tariff in place?
- What is the amount of tariff revenue collected by the government?
- The tariff has reduced consumer surplus. Calculate the loss in consumer surplus due to the tariff.
- What portion of the consumer surplus loss is redistributed to domestic producers? To the government?
- Calculate the deadweight loss due to the tariff.

Answer: a. Price = \$2.00 per pound; Quantity purchased = 15 million pounds  
 b. Consumer surplus =  $\frac{1}{2} \times 15 \text{ million} \times \$3 = \$22.5 \text{ million}$   
 c. Quantity supplied by domestic producers = 10 million pounds  
 d. Producer surplus to rice growers =  $\frac{1}{2} \times 10 \text{ million} \times \$1.25 = \$6.25 \text{ million}$   
 e. Quantity imported = 5 million pounds  
 f. Tariff revenue collected by the government =  $\$0.50 \times 5 \text{ million} = \$2.5 \text{ million}$   
 g. Loss in consumer surplus due to the tariff =  $15 \text{ million} \times \$0.50 + \frac{1}{2} \times 5 \text{ million} \times \$0.50 = \$8.75 \text{ million}$



h. Amount redistributed to domestic producers = 7 million  $\times$  \$0.50 +  $1/2 \times$  3 million  $\times$  \$0.50 = \$4.25 million

Amount redistributed to the government = 5 million  $\times$  \$0.50 = \$2.5 million

i. Deadweight loss due to the tariff =  $1/2 \times$  3 million  $\times$  \$0.50 +  $1/2 \times$  5 million  $\times$  \$0.50 = \$2 million

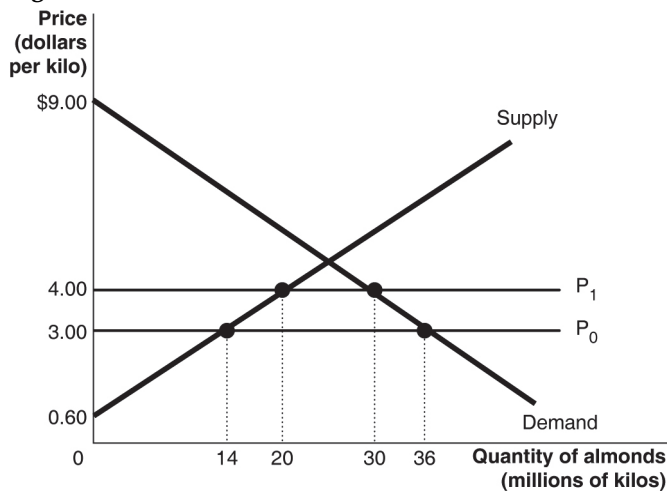
Diff: 3 Page Ref: 286–287

Topic: Tariffs

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

Figure 9–5



Bragabong currently both produces and imports almonds. The government of Bragabong decides to restrict international trade in almonds by imposing a quota that allows imports of only 10 million kilos each year. Figure 9–5 shows the estimated demand and supply curves for almonds in Bragabong and the results of imposing the quota.

55) Use **Figure 9–5** to answer questions a–j .

- If there is no quota what is the domestic price of almonds and what is the quantity of almonds demanded by consumers?
- If there is no quota how many kilos of almonds would domestic producers supply and what quantity would be imported?
- If there is no quota what is the dollar value of consumer surplus?
- If there is no quota what is the dollar value of producer surplus received by producers in Bragabong?
- If there is no quota what is the revenue received by foreign producers who supply almonds to Bragabong?
- With a quota in place what is the price that consumers of Bragabong must now pay and what is the quantity demanded?
- With a quota in place what is the dollar value of consumer surplus? Are consumers better off?
- With a quota in place what is the dollar value of producer surplus received by producers in Bragabong? Are domestic producers better off?
- Calculate the revenue to foreign producers who are granted permission to sell in Bragabong after the imposition of the quota.

- j. Calculate the deadweight loss as a result of the quota.

Answer: a. Price without a quota = \$3 per kilo; quantity demanded = 36 million kilos  
 b. Quantity supplied by domestic producers when there is no quota = 14 million kilos; quantity imported = 22 million kilos  
 c. Consumer surplus without a quota =  $1/2 \times \$6 \times 36 \text{ million} = \$108 \text{ million}$   
 d. Domestic producer surplus without a quota =  $1/2 \times 14 \text{ million} \times \$2.40 = \$16.8 \text{ million}$   
 e. Revenue received by foreign producers when there is no quota =  $22 \text{ million} \times \$3 = \$66 \text{ million}$   
 f. Price with a quota = \$4.00 per kilo; quantity demanded = 30 million kilos  
 g. Consumer surplus with a quota =  $1/2 \times \$5 \times 30 \text{ million} = \$75 \text{ million}$ . No, consumers are worse off.  
 h. Domestic producer surplus with a quota =  $1/2 \times \$3.40 \times 20 \text{ million} = \$34 \text{ million}$ . Yes, domestic producers are better off.  
 i. With a quota revenue to foreign producers =  $\$4 \times 10 \text{ million} = \$40 \text{ million}$   
 j. Deadweight loss =  $1/2 \times \$1 \times 6 \text{ million} + 1/2 \times \$1 \times 6 \text{ million} = \$6 \text{ million}$

Diff: 3 Page Ref: 287-288

Topic: Quotas

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

## 9.5 The Arguments over Trade Policies and Globalization

- 1) Disagreements about whether the U.S. government should regulate international trade
- A) began during the Great Depression.
  - B) began after World War I when government officials no longer believed in isolationism.
  - C) date back to the beginning of the country.
  - D) did not occur until the end of the Mexican War in 1848.

Answer: C

Diff: 1 Page Ref: 290

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 2) \_\_\_\_\_ raised average tariff rates by over 50 percent in the United States in 1930.
- A) The GATT
  - B) The WTO
  - C) NAFTA
  - D) The Smoot-Hawley Tariff

Answer: D

Diff: 1 Page Ref: 290

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 3) In 1930, the U.S. government attempted to help domestic firms that were harmed by the Great Depression by
- A) establishing the General Agreement on Tariffs and Trade (GATT).
  - B) passing the Smoot-Hawley Tariff.
  - C) establishing the World Trade Organization (WTO).
  - D) passing the North American Free Trade Agreement (NAFTA).

Answer: B

Diff: 1 Page Ref: 290

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 4) In 1995 \_\_\_\_\_, which was established in 1948, was replaced by \_\_\_\_\_.
- A) the GATT; the WTO
  - B) the WTO; NAFTA
  - C) the Smoot-Hawley Tariff; the GATT
  - D) NAFTA; the Smoot-Hawley Tariff

Answer: A

Diff: 2 Page Ref: 291

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 5) The World Trade Organization (WTO) promotes foreign trade and investment, or globalization. In recent years opposition to globalization has led to violent protests at meetings of the WTO. One reason for these anti-globalization protests is
- A) foreign trade and investment are examples of zero-sum games.
  - B) protesters believe that globalization will result in a return to communism in developing countries.
  - C) protesters believe that free trade destroys the distinctive cultures of many countries.
  - D) protesters object to the loss of intellectual property (such as software programs and movies) that results from foreign trade and investment.

Answer: C

Diff: 2 Page Ref: 291

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 6) Many people assume that if child workers in developing countries weren't working in factories, they would be in school. In fact, children in developing countries
- A) split their time evenly between work and school.
  - B) usually have few good alternatives to work.
  - C) are only allowed to work if they have attended school up to age 15.
  - D) who work are relatively rare, as most do attend school full time.

Answer: B

Diff: 1 Page Ref: 292

Topic: Trade Policies and Globalization

Learning Outcome: Micro-17: Explain the effects of the factors of production, factor demand, and factor supply and labor in factor markets.

AACSB: Analytic thinking

- 7) Protectionism
- A) is the use of cheap labor to protect firms from paying high wages.
  - B) is the use of trade barriers to protect domestic firms from foreign competition.
  - C) refers to reductions in tariffs and other barriers that protect consumers from paying high prices.
  - D) refers to the use of copyright and trademark laws to protect inventors and artists from losing the rights to their creative efforts.

Answer: B

Diff: 1 Page Ref: 293

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 8) Free trade \_\_\_\_\_ living standards by \_\_\_\_\_ economic efficiency.
- A) raises; increasing
  - B) lowers; decreasing
  - C) raises; equalizing
  - D) lowers; eliminating

Answer: A

Diff: 2 Page Ref: 293

Topic: Trade Policies and Globalization

Learning Outcome: Micro-19: Explain the concept of efficiency in the economy and obstacles to achieving it.

AACSB: Analytic thinking

- 9) Many economists criticize protectionism because it causes losses to consumers and eliminates jobs in domestic industries that use protected products. Why, then, do some people support protectionism?
- A) The criticisms of economists are based on theory. In fact, protectionism increases consumer and producer surplus as well as employment.
  - B) Supporters of protectionism in high-income countries believe that wages will fall as a result of competition with firms from developing countries.
  - C) Supporters of protectionism believe free trade will cause their countries to lose their comparative advantage.
  - D) Supporters of protectionism believe that free trade will lead to inflation.

Answer: B

Diff: 2 Page Ref: 293

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 10) Which of the following statements is used to justify protectionism?
- A) Free trade leads to higher prices for imported goods.
  - B) Free trade increases employment by protecting domestic firms.
  - C) A country should not rely on other countries for goods that are critical to its national defense.
  - D) Trade restrictions are not necessary to protect new firms since they can gain experience and become more productive without protection.

Answer: C

Diff: 2 Page Ref: 294

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 11) Which of the following describes the infant industry argument for protectionism?
- A) An industry must be protected in its early stages of development so that firms can compete with government-subsidized foreign competition.
  - B) Some strategic industries must be protected to ensure adequate supplies of resources needed for national defense in emergencies.
  - C) Domestic producers in high-wage countries must be protected from foreign producers in low-wage countries to produce a level playing field.
  - D) Domestic producers require time to gain experience and lower their unit costs; this will allow these producers to compete successfully in international markets.

Answer: D

Diff: 2 Page Ref: 293–294

Topic: Protectionism

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 12) The process of countries becoming more open to foreign trade and investment is known as
- A) autarky.
  - B) foreign exchange.
  - C) globalization.
  - D) protectionism.

Answer: C

Diff: 2 Page Ref: 291

Topic: Trade Policies and Globalization

Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

- 13) Economists believe the most persuasive argument for protectionism is to protect infant industries. But the argument has a drawback. What is this drawback?
- A) Governments always make the level of protection for infant industries too high.
  - B) Governments are usually too impatient and do not allow protection to remain in place long enough to allow industries to be competitive in international markets.
  - C) Governments usually use tariffs, rather than quotas, to protect infant industries in order to collect tariff revenue. (Quotas do not result in government revenue).
  - D) Protection lessens the need for firms to become productive enough to compete with foreign firms; this often results in infant industries never "growing up."

Answer: D

Diff: 2 Page Ref: 293–294

Topic: Protectionism

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 14) Suppose that American firms claim that protectionism in Canada is on the rise as the Canadian government attempts to protect its infant industries. This protectionism will cause the greatest harm to
- A) Canadian manufacturers.
  - B) the Canadian government.
  - C) manufacturers who export to Canada.
  - D) Canadian consumers.

Answer: C

*Diff: 2 Page Ref: 293–294*

*Topic: Protectionism*

*Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

*AACSB: Analytic thinking*

- 15) Suppose that American firms claim that protectionism in Canada is on the rise as the Canadian government attempts to protect its infant industries with a "Buy Canadian" provision. This policy, similar to the original "Buy American" provision in the 2009 U.S. stimulus bill, is likely to cause

- A) exporting countries to retaliate by placing trade barriers on Canadian imports.
- B) Canadian manufacturers to become more efficient.
- C) Canadian companies to pay lower prices for protected products.
- D) most countries to reduce their own trade barriers to be able to better compete with Canadian imports at home.

Answer: A

*Diff: 2 Page Ref: 293–294*

*Topic: Protectionism*

*Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

*AACSB: Analytic thinking*

- 16) The selling of a product for a price below its cost of production is called

- A) fair competition.
- B) dumping.
- C) unfair competition.
- D) operating at a loss.

Answer: B

*Diff: 1 Page Ref: 294*

*Topic: Dumping*

*Learning Outcome: Micro–3: Discuss different types of market systems and the gains that can be made from trade.*

*AACSB: Analytic thinking*

- 17) Imposing tariffs in cases of dumping

- A) is allowed under the WTO agreement.
- B) is not allowed under the WTO agreement.
- C) is not addressed by the WTO agreement.
- D) has never occurred, even though it is allowed under the WTO agreement.

Answer: A

*Diff: 1 Page Ref: 294*

*Topic: Dumping*

*Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.*

*AACSB: Analytic thinking*

- 18) Measuring the impact of a quota or tariff on the U.S. economy is an example of \_\_\_\_\_. Stating that a quota or tariff should be eliminated is an example of \_\_\_\_\_.

A) statistical analysis; economic analysis      B) positive analysis; normative analysis  
C) econometric analysis; protectionism      D) trade analysis; an opinion

Answer: B

Diff: 1      Page Ref: 294–295

Topic: Trade Restrictions

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 19) One reason for the success that firms have in getting the government to erect barriers to foreign competition is that jobs lost to foreign competition are easy to identify but jobs created by foreign trade are often hard to identify. Which of the following is a second reason?

A) The costs that tariffs and quotas impose on consumers are large in total but relatively small per person.  
B) People who benefit from foreign trade tend not to vote in elections; people who are harmed by foreign trade are much more likely to vote.  
C) Firms that benefit from trade barriers have more money to lobby government officials to support the barriers than do firms that are harmed by trade barriers.  
D) The benefits from free trade are less than the costs.

Answer: A

Diff: 1      Page Ref: 295

Topic: Trade Policies and Globalization

Learning Outcome: Micro–5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

#### Article Summary

**Roberto Azevedo, director-general of the World Trade Organization (WTO), reported that global trade growth estimates will be lowered for 2013 and 2014 because of increasing global protectionism. The current protectionism is based primarily in regulations rather than the more common tariffs and subsidies. Since 2008, almost 700 new trade restrictions have materialized – over 150 of those in 2012 alone – with Russia being singled out as one of the primary offenders.**

**Source: Kiran Moodley, "WTO warns of trade slowdown due to protectionism," CNBC, September 6, 2013.**

- 20) *Refer to the Article Summary.* The protectionism being granted to Russian firms will cause the greatest harm to

A) Russian manufacturers.      B) the Russian government.  
C) manufacturers who export to Russia.      D) Russian consumers.

Answer: C

Diff: 2      Page Ref: 293

Topic: Trade Policies and Globalization

Learning Outcome: Micro–7: Discuss the effects of consumer and producer surpluses in a market.

AACSB: Analytic thinking

- 21) Selling a product at a price below its cost is known as dumping.

Answer: TRUE

Diff: 2 Page Ref: 294

Topic: Dumping

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 22) Protectionism refers to the use of trade barriers to shield domestic firms from foreign competition.

Answer: TRUE

Diff: 1 Page Ref: 293

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 23) The process of countries becoming more open to foreign trade and investment is known as outsourcing.

Answer: FALSE

Diff: 1 Page Ref: 293

Topic: Trade Policies and Globalization

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 24) Jobs lost to foreign trade are generally easy to identify, but jobs created by foreign trade are generally less easy to identify.

Answer: TRUE

Diff: 1 Page Ref: 293

Topic: Trade Policies and Globalization

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

- 25) a. What is the World Trade Organization?  
b. When was it established?  
c. How many countries are members of the World Trade Organization?

Answer: a. The World Trade Organization (WTO) is an international organization based in Geneva, Switzerland, that oversees international trade agreements.

b. The WTO replaced the GATT in January, 1995.

c. Currently, more than 150 countries are members of the WTO.

Diff: 3 Page Ref: 291

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking



## 26) What is dumping? Who benefits and who loses from dumping?

Answer: Dumping refers to selling a product for a price below its cost of production. Consumers benefit by paying a lower price for the product being dumped. Other producers of similar products lose because they must lower their prices to compete with the dumped product.

Diff: 3 Page Ref: 291

Topic: Trade Policies and Globalization

Learning Outcome: Micro-3: Discuss different types of market systems and the gains that can be made from trade.

AACSB: Analytic thinking

27) Dalton, Georgia, a town with a population less than 35,000, has developed into a leading producer of carpets, despite its small size. Some government officials argue that the success achieved by firms in Dalton in developing a comparative advantage in carpet making because of external economies can be used to justify trade barriers as a means to protect an "infant industry." After an infant industry gains experience it can compete in international markets and the trade barriers can be removed. What objections do economists make to this argument in favor of trade barriers?

Answer: Many economists believe that this is the most persuasive argument for protection but experience teaches us that tariffs and quotas can stifle the incentive firms have to become more efficient producers, which is the reason for imposing trade restrictions in the first place. Few firms volunteer to have trade restrictions removed once they have been established.

Diff: 2 Page Ref: 293–294

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

28) Anti-globalization and protectionism are both arguments against free trade. How do these two arguments differ?

Answer: The anti-globalization argument against trade is relatively new. This argument includes the notion that free trade destroys the culture of many countries and that factories locating to low-income countries do not meet environmental or safety regulations that are imposed in high-income countries. The protectionism argument has been around for centuries. Protectionism is usually justified on the basis of one of the following four arguments: saving jobs, protecting high wages, protecting infant industries, and protecting national security.

Diff: 2 Page Ref: 291–293

Topic: Protectionism

Learning Outcome: Micro-5: List ways in which governments intervene in markets and explain the consequences of such intervention.

AACSB: Analytic thinking

# Chapter 10

## Consumer Choice and Behavioral Economics

### 10.1 Utility and Consumer Decision Making

- 1) Economists assume that the goal of consumers is to
- A) do as little work as possible to survive.
  - B) make themselves as well off as possible.
  - C) expend all their income.
  - D) consume as much as possible.

Answer: B

Diff: 1 Page Ref: 306

Topic: Rational Decision Making

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 2) Utility is
- A) easily measured in units called utils.
  - B) subjective and difficult to measure.
  - C) the consumption of a quasi-public good like electricity or natural gas.
  - D) the production of a quasi-public good like electricity or natural gas.

Answer: B

Diff: 1 Page Ref: 306

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 3) Marginal utility is the
- A) total satisfaction received from consuming a given number of units of a product.
  - B) average satisfaction received from consuming a product.
  - C) extra satisfaction received from consuming one more unit of a product.
  - D) satisfaction achieved when a consumer has had enough of a product.

Answer: C

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 4) As a consumer consumes more and more of a product in a particular time period, eventually marginal utility
- A) rises.
  - B) is constant.
  - C) declines.
  - D) fluctuates.

Answer: C

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 5) If a consumer receives 22 units of marginal utility for consuming the first can of soda, 20 units from consuming the second, and 15 from the third, the total utility of consuming the three units is
- A) 57 utility units.
  - B) 35 utility units.
  - C) 15 utility units.
  - D) unknown as more information is needed to determine the answer.

Answer: A

Diff: 1 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 6) If a consumer receives 20 units of utility from consuming two candy bars, and 25 units of utility from consuming three candy bars, the marginal utility of the third candy bar is
- A) 25 utility units.
  - B) 20 utility units.
  - C) 5 utility units.
  - D) unknown as more information is needed to determine the answer.

Answer: C

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 7) If a consumer receives 20 units of utility from consuming two candy bars, and 25 units of utility from consuming three candy bars, the marginal utility of the second candy bar is
- A) 25 utility units.
  - B) 20 utility units.
  - C) 5 utility units.
  - D) unknown as more information is needed to determine the answer.

Answer: D

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 8) Total utility
- A) cannot decrease as a person consumes more and more of a good.
  - B) has a constant rate of increase as a person consumes more and more of a good.
  - C) is equal to the sum of the marginal utilities of all units consumed.
  - D) is negative when marginal utility is declining.

Answer: C

Diff: 2 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 9) If, as a person consumes more and more of a good, each additional unit adds less satisfaction than the previous unit consumed, we are seeing the workings of
- A) the law of demand.
  - B) the law of supply.
  - C) the law of increasing marginal opportunity cost.
  - D) the law of diminishing marginal utility.

Answer: D

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 10) The law of diminishing marginal utility states that
- A) eventually total utility falls as more of a good is consumed, other things constant.
  - B) the extra satisfaction from consuming a good decreases as more of a good is consumed, other things constant.
  - C) the extra satisfaction from consuming a good increases slowly as more of a good is consumed, other things constant.
  - D) when the extra satisfaction from consuming a good becomes negative, total utility starts falling, other things constant.

Answer: B

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 11) Marginal utility can be
- A) negative.
  - B) zero.
  - C) positive.
  - D) positive, negative or zero.

Answer: D

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 12) Which of the following is likely to occur as the result of the law of diminishing marginal utility?
- A) Petra's utility from her second apple was less than her satisfaction from her first orange.
  - B) Hudson enjoyed his second slice of pizza more than his first.
  - C) Sabine's utility from her first granola bar is greater than Rachel's utility from her second granola bar.
  - D) Wesley enjoyed his second bottle of iced tea less than his first bottle, other things constant.

Answer: D

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 13) If, when you consume another piece of candy, your marginal utility is zero, then
- A) you want more candy.
  - B) you have maximized your total utility from consuming candy.
  - C) you have not yet reached the point of diminishing marginal utility.
  - D) you should consume less candy.

Answer: B

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 14) Consumers have to make tradeoffs in deciding what to consume because
- A) not all goods give them the same amount of satisfaction.
  - B) the prices of goods vary.
  - C) they are limited by a budget constraint.
  - D) there are not enough of all goods produced.

Answer: C

Diff: 1 Page Ref: 307

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 15) If your total satisfaction increases when you consume another unit, your marginal utility must be
- A) increasing.
  - B) decreasing.
  - C) negative.
  - D) positive.

Answer: D

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 16) If total utility increases at a decreasing rate as a consumer consumes more coffee, then marginal utility must
- A) remains constant.
  - B) increase also.
  - C) decrease.
  - D) be negative.

Answer: C

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 17) An item has utility for a consumer if it
- A) is scarce.
  - B) has a high price.
  - C) is something everyone else wants.
  - D) generates enjoyment or satisfaction.

Answer: D

Diff: 1 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 18) Suppose your marginal utility from consuming the 3rd slice of cake is zero, then your total utility from consuming cake is
- A) maximized.                      B) decreasing.                      C) negative.                      D) increasing.

Answer: A

Diff: 2      Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 19) Consumers maximize total utility within their budget constraint by
- A) buying the cheapest goods they can find.  
 B) buying whatever they like the best.  
 C) buying the goods with the largest marginal utility per dollar spent.  
 D) spending the same dollar amount for each good.

Answer: C

Diff: 2      Page Ref: 307–308

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 20) If a consumer always buys goods rationally, then
- A) the total utilities of the different goods consumed will be equal.  
 B) the average utilities of the different goods consumed will be equal.  
 C) the marginal utility per dollar spent on all goods will be equal.  
 D) the marginal utility of the different goods consumed will be equal.

Answer: C

Diff: 2      Page Ref: 307–308

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Table 10–1**

Quantity of Pita Wraps	Total Utility	Quantity of Bubble Tea	Total Utility
1	60	1	40
2	102	2	70
3	132	3	91
4	144	4	106
5	144	5	112
6	138	6	115
7	128	7	115

Keegan has \$30 to spend on Pita Wraps and Bubble Tea. The price of a Pita Wrap is \$6 and the price of a glass of Bubble Tea is \$3. Table 10–1 shows his total utility from different quantities of the two items.

- 21) *Refer to Table 10–1.* What is Keegan's optimal consumption bundle?
- A) 3 pita wraps and 3 bubble teas                      B) 3 pita wraps and 4 bubble teas  
 C) 4 pita wraps and 2 bubble teas                      D) 5 pita wraps and 0 bubble teas

Answer: B

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 22) **Refer to Table 10–1.** If Keegan can drink all the bubble tea he wants for free, how many glasses will he consume?

A) 4 glasses                      B) 5 glasses                      C) 6 glasses                      D) 7 glasses

Answer: C

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 23) Carolyn spends her income on popular magazines and music CDs. If the price of a CD is four times the price of a magazine and if Carolyn is maximizing her utility, she buys

A) both goods until the marginal utility of the last CD purchased is four times the marginal utility of the last magazine purchased.  
 B) both goods until the marginal utility of the last magazine purchased is four times the marginal utility of the last CD purchased.  
 C) four times as much magazines as CDs.  
 D) four times as much CDs as magazines.

Answer: A

Diff: 3 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 24) Suppose Joe is maximizing total utility within his budget constraint. If the price of the last pair of jeans purchased is \$25 and it yields 100 units of extra satisfaction and the price of the last shirt purchased is \$20, then, using the rule of equal marginal utility per dollar spent, the extra satisfaction received from the last shirt must be

A) 2,000 units of utility.                      B) 500 units of utility.  
 C) 100 units of utility.                      D) 80 units of utility.

Answer: D

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 25) Avner is maximizing total utility by buying sports magazines and protein supplements. For him to buy more sports magazines

A) the price of protein supplements. has to fall.  
 B) the price of sports magazines has to fall.  
 C) the price of sports magazines has to rise.  
 D) Since Avner is maximizing his utility, nothing can change the consumption of sports magazines.

Answer: B

Diff: 2 Page Ref: 307–310

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 26) Most people would prefer to drive a luxury car that has all the options, but more people buy less expensive cars even though they could afford the luxury car because
- A) car buyers are irrational.
  - B) the total utility of less expensive cars is greater than that of luxury cars.
  - C) the marginal utility per dollar spent on the less expensive car is higher than that spent on luxury cars.
  - D) luxury cars cost a lot more than non-luxury cars.

Answer: C

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 27) If Valerie purchases ankle socks at \$5 and gets 25 units of marginal utility from the last unit, and bandanas at \$3 and gets 12 units of marginal utility from the last bandana purchased, she
- A) is maximizing total utility and does not want to change their consumption of ankle socks or bandanas.
  - B) wants to consume more ankle socks and fewer bandanas.
  - C) wants to consume more of bandanas and fewer ankle socks.
  - D) wants to consume less of both ankle sock and bandanas.

Answer: B

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 28) If Marlowe obtains 9 units of utility per dollar spent on apples and 6 units of utility per dollar spent on oranges, then Marlowe
- A) is maximizing total utility.
  - B) should buy more apples and fewer oranges.
  - C) should buy more oranges and fewer apples.
  - D) should buy fewer oranges and fewer apples.

Answer: B

Diff: 2 Page Ref: 307–310

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 29) If Callum is consuming his utility maximizing bundle and the price of one good rises, what happens to the marginal utility per dollar spent on this good ( $MU/P$ ), and what should Callum do?
- A)  $MU/P$  has increased and Callum should buy more of this good.
  - B)  $MU/P$  has increased and Callum should buy less of this good.
  - C)  $MU/P$  has decreased and Callum should buy more of this good.
  - D)  $MU/P$  has decreased and Callum should buy less of this good.

Answer: D

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking



- 30) If Ewan is consuming his utility maximizing bundle and the price of one good falls, what happens to the marginal utility per dollar spent on this good (MU/P), and what should Ewan do?

A) MU/P has increased and Ewan should buy more of this good.  
 B) MU/P has increased and Ewan should buy less of this good.  
 C) MU/P has decreased and Ewan should buy more of this good.  
 D) MU/P has decreased and Ewan should buy less of this good.

Answer: A

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 31) When the price of audio books, a normal good, falls, causing your purchasing power to rise, you buy more of them due to

A) the substitution effect. B) the income effect.  
 C) the deadweight loss effect. D) the elasticity effect.

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 32) When the price of summer tank tops falls and you buy more of them because they are relatively less expensive, this is called

A) the substitution effect. B) the income effect.  
 C) the deadweight loss effect. D) the elasticity effect.

Answer: A

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 33) The substitution effect of an increase in the price of Raisin Bran refers to

A) the decrease in the demand for Raisin Bran when its price rises.  
 B) the result that consumers will now switch to a substitute good such as Cheerios, and the demand curve for Raisin Bran shifts to the left.  
 C) the fact that the higher price of Raisin Bran lowers consumer's purchasing power, holding money income constant.  
 D) the fact that the higher price of Raisin Bran relative to its substitutes, such as Cheerios, cause consumers to buy less Raisin Bran.

Answer: D

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 34) The income effect of an increase in the price of salmon
- A) is the change in the demand for salmon when income increases.
  - B) refers to the relative price effect – salmon is more expensive compared to other types of fish – which causes the consumer to buy less salmon.
  - C) refers to the effect on a consumer's purchasing power which causes the consumer to buy less salmon, holding all other factors constant.
  - D) is the change in the demand for other types of fish, say trout, that result from a decrease in purchasing power.

Answer: C

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 35) If the price of lattes, a normal good you enjoy, falls
- A) the income and substitution effects offset each other but the price effect leads you to buy more lattes.
  - B) both the income and substitution effects lead you to buy more lattes.
  - C) the income effect which causes you to increase your latte consumption outweighs the substitution effect which causes you to reduce your latte consumption, resulting in more latte purchased.
  - D) the substitution effect which causes you to increase your latte consumption outweighs the income effect which causes you to reduce your latte consumption, resulting in more latte purchased.

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 36) If the price of muffins, a normal good you enjoy, rises
- A) the income and substitution effects offset each other but the price effect leads you to buy fewer muffins.
  - B) both the income and substitution effects lead you to buy fewer muffins.
  - C) the substitution effect which causes you to decrease your muffin consumption outweighs the income effect which causes you to increase your muffin consumption, resulting in fewer muffins purchased.
  - D) the income effect which causes you to decrease your muffin consumption outweighs the substitution effect which causes you to increase your muffin consumption, resulting in fewer muffins purchased.

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 37) The demand curve for corn is downward sloping. If the price of corn, an inferior good, falls
- A) the income effect which causes you to reduce your corn purchases is smaller than the substitution effect which causes you to increase your corn purchases, resulting in a net increase in quantity demanded.
  - B) the income effect which causes you to increase your corn purchases is larger than the substitution effect which causes you to reduce your corn purchases, resulting in a net increase in quantity demanded.
  - C) both the income and substitution effects reinforce each other to increase the quantity demanded.
  - D) the income and substitution effects offset each other but the price effect of an inferior good leads you to buy less corn.

Answer: A

Diff: 3 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 38) The demand curve for canned peas is downward sloping. If the price of canned peas, an inferior good, rises
- A) the income effect which causes you to reduce your canned peas purchases is smaller than the substitution effect which causes you to increase your purchases, resulting in a net increase in quantity demanded.
  - B) the income effect which causes you to increase your canned peas purchases is smaller than the substitution effect which causes you to reduce your purchases, resulting in a net decrease in quantity demanded.
  - C) both the income and substitution effects reinforce each other to decrease the quantity demanded.
  - D) the income and substitution effects offset each other but the price effect of an inferior good leads you to buy more canned peas.

Answer: B

Diff: 3 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 39) Consider a downward-sloping demand curve. When the price of an inferior good increases, the income and substitution effects
- A) work in the same direction to increase quantity demanded.
  - B) work in the same direction to decrease quantity demanded.
  - C) work in opposite directions and quantity demanded increases.
  - D) work in opposite directions and quantity demanded decreases.

Answer: D

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 40) Consider a downward-sloping demand curve. When the price of an inferior good decreases, the income and substitution effects

A) work in the same direction to increase quantity demanded.  
 B) work in the same direction to decrease quantity demanded.  
 C) work in opposite directions and quantity demanded increases.  
 D) work in opposite directions and quantity demanded decreases.

Answer: C

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 41) Consider a downward-sloping demand curve. When the price of a normal good increases, the income and substitution effects

A) work in the same direction to increase quantity demanded.  
 B) work in the same direction to decrease quantity demanded.  
 C) work in opposite directions and quantity demanded increases.  
 D) work in opposite directions and quantity demanded decreases.

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 42) Consider a downward-sloping demand curve. When the price of a normal good decreases, the income and substitution effects

A) work in the same direction to increase quantity demanded.  
 B) work in the same direction to decrease quantity demanded.  
 C) work in opposite directions and quantity demanded increases.  
 D) work in opposite directions and quantity demanded decreases.

Answer: A

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Table 10–2**

Quantity of Soup (cups)	Total Utility	Quantity of Sandwiches	Total Utility
1	40	1	45
2	60	2	75
3	72	3	102
4	82	4	120
5	88	5	135
6	90	6	145

Table 10–2 above shows Keira's utility from soup and sandwiches. The price of soup is \$2 per cup and the price of a sandwich is \$3. Keira has \$18 to spend on these two goods.

- 43) *Refer to Table 10–2.* What is Keira's marginal utility per dollar spent on the third cup of soup?

- A) 72 units of utility
- B) 36 units of utility
- C) 12 units of utility
- D) 6 units of utility

Answer: D

Diff: 1 Page Ref: 310–311

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 44) **Refer to Table 10–2.** If Keira maximizes her utility, how many units of each good should she buy?

- A) 1 cup of soup and 5 sandwiches
- B) 3 cups of soup and 4 sandwiches
- C) 6 cups of soup and 2 sandwiches
- D) 4 cups of soup and 3.5 sandwiches

Answer: B

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 45) **Refer to Table 10–2.** Suppose Keira's income increases from \$18 to \$23 but prices have not changed. What is her utility maximizing bundle now?

- A) 6 cups of soup and 5 sandwiches
- B) 4 cups of soup and 5 sandwiches
- C) 5 cups of soup and 4 sandwiches
- D) 5 cups of soup and 5 sandwiches

Answer: B

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 46) **Refer to Table 10–2.** Holding prices constant, when Keira's income changed from \$18 to \$23, her utility maximizing bundle changed. Based on your answers to her optimal choices at the two income levels, what type of goods are soup and sandwiches?

- A) Soup is an inferior good and sandwiches are a normal good.
- B) Soup is a normal good and sandwiches are an inferior good.
- C) Both soup and sandwiches are normal goods.
- D) Both soup and sandwiches are inferior goods.

Answer: C

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 47) **Refer to Table 10–2.** Holding prices constant, when Keira's income changed from \$18 to \$23, what happens to her total utility and to the marginal utilities of the last cup of soup and the last sandwich purchased?

- A) Her total utility increases but the marginal utilities of the last cup of soup and the last sandwich consumed decrease.
- B) Her total utility, the marginal utility of the last cup of soup consumed and the marginal utility of the last sandwich consumed, all increase.
- C) Her total utility decreases but the marginal utilities of the last cup of soup and the last sandwich consumed increase.

- D) Her total utility and the marginal utility of the last cup of soup consumed increase but marginal utility of the last sandwich consumed decreases.
- E) Her total utility and the marginal utility of the last sandwich consumed increase but marginal utility of the last cup of soup consumed decreases.

Answer: A

Diff: 2 Page Ref: 310–311

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 48) Adhira buys chocolates and almonds. She has 3 bars of chocolates and 4 bags of almonds. The marginal utility of the third chocolate bar is 18 units of utility and the marginal utility from the fourth bag of almonds is also 18. Is Adhira maximizing her utility?
- A) Yes, the marginal utility from the last unit of each good is equal.
  - B) No, she must buy 1 more chocolate bar to equate her quantities of the two goods.
  - C) No, she must buy cut back to 3 bags of almonds to equate her quantities of the two goods.
  - D) No, without information on her income and the prices of the two goods, we cannot answer the question.

Answer: D

Diff: 2 Page Ref: 312

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 49) Economists usually assume that people act in a rational, self-interested way. In explaining how consumers make choices this means that economists believe
- A) consumers will always buy goods and services at the lowest possible prices.
  - B) consumers spend their incomes to order to accumulate the most goods and services.
  - C) consumers make choices that will leave them as satisfied as possible given their incomes, tastes and the prices of goods and services available to them.
  - D) consumers will spend their incomes and time on activities that benefit themselves as much as possible, without regard to the welfare of others.

Answer: C

Diff: 1 Page Ref: 306

Topic: Rational Decision Making

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 50) The satisfaction a person receives from consuming goods and services is called
- A) contentment.
  - B) psychic income.
  - C) wealth.
  - D) utility.

Answer: D

Diff: 1 Page Ref: 306

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 51) The economic model of consumer behavior predicts that
- A) consumers will try to earn as much income as they can over their lifetimes.
  - B) consumers will choose to buy the combination of goods and services that make them as well off as possible from those combinations that their budgets allow them to buy.
  - C) consumers will try to accumulate as many goods and services as they can before they die.
  - D) consumers divide their time between consumption and leisure activities in order to maximize social welfare.

Answer: B

Diff: 1 Page Ref: 306

Topic: Consumer Behavior

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 52) An economist observes two consumers in a supermarket. One of the consumers buys a case of Coca-Cola and the other buys a case of Pepsi-Cola. Both colas sell for the same price and the ages and incomes of the consumers are also the same. Based on this information, how would the economist explain the consumers' choices?
- A) One of the consumers made the wrong choice, but it is impossible to say which one.
  - B) Both consumers should have considered buying other colas that had lower prices.
  - C) Both consumers should have purchased less than a case because they would be able to buy more later.
  - D) Apparently, the consumers had different tastes.

Answer: D

Diff: 1 Page Ref: 306

Topic: Consumer Behavior

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 53) The word "util" has been used by economists in the past as an objective measure of utility. Today economists believe that
- A) utility cannot be measured objectively.
  - B) utility can be measured objectively because people can use prices of different goods to measure utility.
  - C) all of the important conclusions of the economic model of consumer behavior depend on utility being measured objectively.
  - D) the util truly is an objective, rather than a subjective, measure of utility.

Answer: A

Diff: 2 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 54) Suppose the marginal utilities for the first three cans of soda are 100, 80 and 60, respectively. The total utility received from consuming 2 cans is
- A) 20.
  - B) 80.
  - C) 90.
  - D) 180.

Answer: D

Diff: 1 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 55) The additional utility that George receives from consuming one more slice of pizza is called
- A) average utility.
  - B) marginal utility.
  - C) total utility.
  - D) diminishing utility.

Answer: B

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 56) Marginal utility is
- A) the change in total utility divided by the price of the last unit of a good or service consumed.
  - B) the change in total utility a person receives from consuming an additional unit of a good or service.
  - C) the utility from consuming a given quantity of a good or service.
  - D) the decrease in total utility from consuming more and more units of a good or service.

Answer: B

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 57) If marginal utility of apples is diminishing and is a positive amount, consuming one more apple will cause
- A) total utility to decrease.
  - B) a consumer to get no satisfaction from consuming apples.
  - C) a consumer's total utility to increase.
  - D) a consumer to go beyond her optimal consumption of apples.

Answer: C

Diff: 2 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 58) If Paul decides to buy a \$60 ticket to a Cirque du Soleil show rather than a \$45 ticket for a Blue Man Group performance, we can conclude that
- A) the marginal utility per dollar spent on Cirque du Soleil is lower than the marginal utility per dollar spent on Blue Man Group.
  - B) Paul's demand for a ticket to see Cirque du Soleil is more elastic than his demand for a ticket to see Blue Man Group.
  - C) Paul is not making a rational choice.
  - D) the marginal utility per dollar spent on Cirque du Soleil is higher than the marginal utility per dollar spent on Blue Man Group.

Answer: D

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking



- 59) If the marginal utility Ida Mae receives from eating chicken wings is negative then
- A) her total utility from eating chicken wings has fallen.
  - B) her total utility from eating chicken wings is negative as well.
  - C) Ida Mae definitely does not like chicken wings.
  - D) her total utility has risen, but by less from the last chicken wing than from the next to last chicken wing.

Answer: A

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 60) If Joey Kobayashi experiences diminishing marginal utility from eating hot dogs then
- A) his total utility from eating hot dogs is negative.
  - B) the marginal utility from the next hot dog Joey eats will be negative.
  - C) the additional satisfaction he receives from eating another hot dog will be less than the satisfaction he received from his eating his last hot dog.
  - D) Joey is maximizing the marginal utility per dollar he receives from eating hot dogs.

Answer: C

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 61) Optimal decisions are made
- A) in the marketplace.
  - B) if information about prices and marginal utilities is known.
  - C) when marginal utility is minimized.
  - D) at the margin.

Answer: D

Diff: 1 Page Ref: 307

Topic: Rational Decision Making

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 62) Total utility is maximized in the consumption of two goods by
- A) equating the marginal utility for each good consumed.
  - B) equating the marginal utility per dollar for each good consumed.
  - C) equating the total utility of each good divided by its price.
  - D) maximizing expenditure on each good.

Answer: B

Diff: 2 Page Ref: 309

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 63) In making decisions about what to consume, a person's goal is to
- A) allocate her limited income among all the products she wishes to buy so that she receives the highest total utility.
  - B) buy low-priced goods rather than high-priced goods.
  - C) maximize her marginal utility from the goods and services she wishes to buy using her limited income.
  - D) consume as many necessities as possible and then, if there is money left over, to buy luxuries.

Answer: A

Diff: 2 Page Ref: 309

Topic: Rational Decision Making

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 64) The amount of income a consumer has to spend on goods and services is known as
- A) purchasing power.
  - B) effective demand.
  - C) a budget constraint.
  - D) wealth.

Answer: C

Diff: 1 Page Ref: 307

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 65) A budget constraint
- A) represents the bundles of consumption that make a consumer equally happy.
  - B) refers to the limited amount of income available to consumers to spend on good and services.
  - C) reflects the desire by consumers to increase their income.
  - D) shows the prices that a consumer chooses to pay for products he consumes.

Answer: B

Diff: 1 Page Ref: 307

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 66) The restriction that a consumer's total expenditure on goods and services purchased cannot exceed the income available is referred to as
- A) maximizing behavior.
  - B) economizing behavior.
  - C) the price constraint.
  - D) the budget constraint.

Answer: D

Diff: 1 Page Ref: 307

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 67) Which of the following is explained by the law of diminishing marginal utility?
- A) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her third bottle of Coca-Cola.
  - B) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her third pretzel.
  - C) The marginal utility of Isabel's second bottle of Coca-Cola is greater than the marginal utility of her friend Margie's third pretzel.
  - D) The total utility of one bottle of Coca-Cola is greater than the total utility of two bottles of Coca-Cola.

Answer: A

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 68) Marv Pilson has \$50 worth of groceries in a shopping cart at his local Shop 'n Save. Assume that the marginal utility per dollar of the liter bottles of soft drink in Marv's cart equals 50. The marginal utility per dollar of the boxes of cereal in Marv's cart equals 20. Marv has only \$50 to spend, but has not yet paid for his groceries. How can Marv increase his total utility without spending more than \$50?
- A) Marv should substitute his favorite soft drink or the cereal in his cart for generic brands that have lower prices.
  - B) Marv should buy more boxes of cereal and fewer bottles of soft drink.
  - C) Marv should buy fewer boxes of cereal and more bottles of soft drink.
  - D) Marv should buy fewer boxes of cereal and fewer bottles of soft drink. He can then spend more on other items.

Answer: C

Diff: 2 Page Ref: 307

Topic: Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Table 10-3**

	<b>Ice Cream Cones</b>	<b>Lime Fizz Soda</b>
<b>Quantity</b>	<b>MU</b>	<b>MU</b>
1	30	40
2	25	35
3	20	26
4	15	18
5	10	15
6	5	7

- 69) *Refer to Table 10-3.* The table above shows Lee's marginal utility per dollar from consuming ice cream cones and cans of Lime Fizz Soda. The price of an ice cream cone is \$2 and the price of Lime Fizz Soda is \$1. Use this information to select the correct statement.
- A) We cannot determine how many ice cream cones and cans of Lime Fizz Soda Lee will consume without knowing what his income is.
  - B) To maximize his utility Lee should consume 1 ice cream cone and 5 cans of Lime Fizz Soda.

- C) We cannot determine how many ice cream cones and cans of Lime Fizz Soda will maximize Lee's utility because we are given only the marginal utility per dollar values. We also need to know the marginal utility for each quantity.
- D) If Lee has an unlimited budget he will maximize his utility by buying only Lime Fizz Soda.

Answer: A

Diff: 2 Page Ref: 310–311

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 70) **Refer to Table 10–3.** The table above shows Lee's marginal utility from consuming ice cream cones and cans of Lime Fizz Soda. Select the phrase that completes the following statement. "We can determine the number of ice cream cones and cans of Lime Fizz Soda Lee should consume to maximize his utility
- A) if we know what Lee's income is."
  - B) if we know what Lee's income is and the price of an ice cream cone and the price of a can Lime Fizz Soda."
  - C) by adding up the marginal utilities for ice cream cones and Lime Fizz Soda."
  - D) if we know the values of the marginal utility per dollar for ice cream cones and Lime Fizz Soda."

Answer: B

Diff: 2 Page Ref: 310–311

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 71) During a study session for an economics exam with three other students, Peter Daltry commented on an example of a consumer who had to decide the on number of slices of pizza and cups of Coca-Cola he would consume. Peter explained that "To maximize his utility this consumer must equate the marginal utility per dollar for pizza and Coca-Cola." Was Peter's analysis correct?
- A) Peter described one of the conditions necessary for utility maximization. The consumer also must equate the marginal utility of pizza and the marginal utility of cups of Coca-Cola.
  - B) Peter's statement is correct.
  - C) Peter's statement is correct but we must also assume that the consumer is rational.
  - D) Peter describes one of the conditions necessary for utility maximization. The second condition is that total spending on both goods must equal the amount available to be spent.

Answer: D

Diff: 2 Page Ref: 307–310

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Table 10-4

	Steak & Cheese	Steak & Cheese	Grilled Chicken	Grilled Chicken
Quantity	<i>MU</i>	<i>MU/P</i>	<i>MU</i>	<i>MU/P</i>
1	40	10	30	15
2	32	8	24	12
3	20	5	16	8
4	12	3	12	6
5	6	1.5	8	4
6	2	0.5	4	2

72) Refer to Table 10-4. For steak and cheese and grilled chicken sandwiches, the table contains the values of the marginal utility (*MU*) and marginal utility per dollar (*MU/P*) for Mabel Jarvis. Mabel has \$14 to spend on steak and cheese and grilled chicken sandwiches. Which of the following statements is *false*?

- A) The price of steak and cheese sandwiches is \$4. The price of grilled chicken sandwiches is \$2.
- B) If Mabel maximizes her utility she will buy three grilled chicken sandwiches.
- C) If Mabel maximizes her utility she will buy two steak and cheese sandwiches.
- D) We do not have enough information to determine how many sandwiches Mabel will buy to maximize her utility.

Answer: D

Diff: 2 Page Ref: 307-310

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

73) Refer to Table 10-4. For steak and cheese and grilled chicken sandwiches, the table contains the values of the marginal utility (*MU*) and marginal utility per dollar (*MU/P*) for Mabel Jarvis. Mabel has \$14 to spend on steak and cheese and grilled chicken sandwiches. Which of the following statements is *true*?

- A) If Mabel maximizes her utility she will buy three steak and cheese sandwiches and two grilled chicken sandwiches.
- B) If Mabel was maximizing her utility when spending \$14 and then received an additional \$4, she would receive the most marginal utility per dollar if her next purchase was another grilled chicken sandwich.
- C) Mabel will first buy two steak and cheese sandwiches; then with her remaining \$6 she will buy three grilled chicken sandwiches.
- D) To maximize her utility, Mabel will need a total of \$36, the income needed to buy 6 steak and cheese sandwiches and 6 grilled chicken sandwiches.

Answer: B

Diff: 3 Page Ref: 307-310

Topic: Marginal Utility

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 74) The marginal utility per dollar that Harold Stratton receives from oranges is greater than the marginal utility per dollar Harold receives from pears. To maximize his utility, what should Harold do?
- A) He should acquire more income so that he can afford to buy more oranges and pears.
  - B) He should reduce his consumption of both oranges and pears so that he can buy a greater variety of goods.
  - C) He should buy fewer pears and more oranges.
  - D) He should buy fewer oranges and more pears.

Answer: C

Diff: 1 Page Ref: 311–313

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 75) There are two conditions necessary for a consumer to maximize her utility. One is that the marginal utilities per dollar spent on each good and service consumed are equal. What is the other condition?
- A) Total spending on all goods and services must equal the amount available to be spent.
  - B) The consumer must be satisfied with the choices she makes.
  - C) The total spent on each good and service is the same.
  - D) The prices of each good and service consumed must not be too high.

Answer: A

Diff: 1 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Table 10–5**

	Italian Sub	Italian Sub	Taco	Taco	Taco
Quantity	MU	MU/\$4	MU	MU/\$2	MU/\$1
1	40	10	30	15	30
2	32	8	24	12	24
3	20	5	16	8	16
4	12	3	12	6	12
5	6	1.5	8	4	8
6	2	0.5	4	2	4

- 76) Refer to Table 10–5, which lists the values of Harry Taber's marginal utility and marginal utility per dollar for Italian submarine (sub) sandwiches and tacos. Assume that the price of the sub sandwiches is \$4 and the price of tacos is \$2. When Harry's income is \$14 he buys two Italian sub sandwiches and three tacos. The last column lists the values of the marginal utility per dollar for tacos when the price of tacos decreases to \$1. Complete this statement: As a result of the change in price
- A) Harry's purchasing power has increased. He will reduce his consumption of tacos so he can buy one more sub. This is an example of the substitution effect of a price change.
  - B) Harry's purchasing power has increased. If tacos are a normal good for Harry he will buy fewer tacos. This is an example of the income effect of a price change.
  - C) Harry's purchasing power has increased. If tacos are a normal good for Harry he will buy more tacos. This is an example of the income effect of a price change.

- D) Harry's purchasing power has increased. Harry buys fewer tacos. This is an example of the substitution effect of a price change

Answer: C

Diff: 3 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 77) Refer to Table 10–5, which lists the values of Harry Taber's marginal utility and marginal utility per dollar for Italian submarine (sub) sandwiches and tacos. Assume that the price of the sub sandwiches is \$4 and the price of tacos is \$2. When Harry's income is \$14 he buys two Italian sub sandwiches and three tacos. The last column lists the values of the marginal utility per dollar for tacos when the price of tacos decreases to \$1. Complete this statement: As a result of the change in price, the marginal utility of each taco Harry consumes increases and
- A) the substitution effect of the price change will cause Harry to buy more tacos and fewer subs.
  - B) the substitution effect of the price change will cause Harry to buy more tacos if they are a normal good, and fewer tacos if they are an inferior good.
  - C) the substitution effect will cause Harry to buy another sub because his purchasing power has increased.
  - D) the substitution effect will cause Harry to buy fewer tacos.

Answer: A

Diff: 3 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 78) Marge buys 5 CDs and 7 DVDs. The marginal utility of the 5th CD and the marginal utility of the 7th DVD are both equal to 30 utils. Can we say that this is the optimal combination of CDs and DVDs for Marge?
- A) No. We need to know her preferences for CDs and DVDs.
  - B) Yes.
  - C) No. We need to know the prices of the CDs and DVDs.
  - D) No. If this was the optimal combination, the marginal utility per dollar of the 5th CD and the 7th DVD would be equal.

Answer: D

Diff: 3 Page Ref: 312

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Table 10–6

Quantity of Burgers	Marginal Utility	Quantity of Pepsi	Marginal Utility
1	20	1	30
2	14	2	10
3	10	3	7
4	3	4	5
5	1	5	1
6	–5	6	0
7	–10	7	–4

Table 10–6 lists Jay's marginal utilities for burgers and Pepsi. Jay has \$7 to spend on these two goods. The price of a burger is \$2 and the price of a can of Pepsi is \$1.

79) *Refer to Table 10–6.* What is Jay's optimal consumption bundle?

- A) 1 burger and 2 Pepsis  
 B) 2 burgers and 3 Pepsis  
 C) 3 burgers and 1 Pepsi  
 D) 3 burgers and 2 Pepsis

Answer: B

Diff: 3 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

80) *Refer to Table 10–6.* If Jay can eat all the burgers he wants for free, how many burgers will he consume?

- A) 7 burgers  
 B) 6 burgers  
 C) 5 burgers  
 D) 3 burgers

Answer: C

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

81) Suppose Barry is maximizing his utility from consuming used paperback novels and audio books. The price of a used novel = \$4 and the price of an audio book = \$8. If the marginal utility of the last novel was 32 units of utility (utils) what was the marginal utility of the last audio book purchased?

- A) 2 utils  
 B) 12 utils  
 C) 16 utils  
 D) 64 utils

Answer: D

Diff: 3 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

82) Terence has \$50 per week to spend on Subway sandwiches and milkshakes. The price of a Subway sandwich is \$5 and the price of a milkshake is \$4. He buys 6 sandwiches and 5 milkshakes. The marginal utility of the 6th sandwich = 25 and the marginal utility of the 5th milkshake = 24. Which of the following is *true*?

- A) He is not maximizing his utility and should buy more milkshakes.  
 B) He is maximizing his utility.  
 C) He is not maximizing his utility and should buy more Subway sandwiches.



D) He is not maximizing his utility because he is not spending all of his income.

Answer: A

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

83) Suppose Renee can increase her total utility from consuming video rentals and books by buying one more book and renting one fewer video. Which of the following is *true*?

- A) The marginal utility of video rentals is negative.
- B) The marginal utility per dollar spent on books exceeds that of video rentals.
- C) The marginal utility of the last book consumed exceeds the marginal utility of the last video rental consumed.
- D) The marginal utility of the last video rental consumed exceeds the marginal utility of the last book consumed.

Answer: B

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Table 10–7**

Quantity of Beer (glasses)	Total Utility	Quantity of Pizza (slices)	Total Utility
1	25	1	20
2	45	2	35
3	60	3	45
4	65	4	50
5	69	5	52
6	70	6	52

Table 10–7 shows Antonio's utility from beer and pizza.

84) **Refer to Table 10–7.** What is Antonio's marginal utility from consuming the fifth beer?

- A) 4 utils
- B) 13.6 utils
- C) 69 utils
- D) 134 utils

Answer: A

Diff: 1 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

85) *Refer to Table 10–7.* Suppose Antonio has \$10 to spend and the price of beer = \$2 per glass and the price of pizza = \$2 per slice. How many of each good will he consume when he maximizes his utility?

- A) 2 glasses of beer, 1 slice of pizza
- B) 2 glasses of beer, 3 slices of pizza
- C) 3 glasses of beer, 2 slices of pizza
- D) 4 glasses of beer, 5 slices of pizza

Answer: C

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

86) If Lisa spends her income on veggie burgers and pints of soy milk and the price of veggie burgers is three times the price of a pint of soy milk, then when Lisa maximizes her utility she will buy

- A) both goods until the marginal utility of veggie burgers is three times the marginal utility of soy milk.
- B) three times as many veggie burgers as pints of soy milk.
- C) three times as many pints of soy milk as veggie burgers.
- D) both goods until the marginal utility of a pint of soy milk is three times the marginal utility of veggie burgers.

Answer: A

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

87) The income effect of a price change refers to

- A) the change in demand that occurs when consumer income changes.
- B) the change in the quantity demanded that results from a change in price, making the good more or less expensive relative to other goods, holding everything else constant.
- C) the change in demand that occurs when both income and price change.
- D) the change in the quantity demanded of a good that results from the effect of a change in price on consumer purchasing power, holding everything else constant.

Answer: D

Diff: 1 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

88) Which of the following describes the substitution effect of a price change?

- A) The change in demand that results from a change in price, making the good more or less expensive relative to other goods, holding constant the effect of the price change on consumer purchasing power.
- B) The change in quantity demanded of a good that results from the effect of a change in price on consumer purchasing power, holding everything else constant.
- C) The change in quantity demanded of a good that results from the change in the price of a substitute for the good.
- D) The change in quantity demanded of a good that results from a change in price, making the good more or less expensive relative to other goods, holding constant the effect of the price change on consumer purchasing power.

Answer: D

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 89) Which of the following correctly describes the result of a price increase for an inferior good?
- A) Both the substitution effect and the income effect cause the consumer to buy less of the good.
  - B) The substitution effect causes the consumer to buy less of the good and the income effect causes the consumer to buy more of the good.
  - C) The substitution effect causes the demand for the good to decrease; the income effect causes the demand for the good to increase.
  - D) The substitution effect causes the demand for the good to increase; the income effect causes the demand for the good to decrease.

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 90) The substitution effect of a decrease in the price of movie tickets results in
- A) an increase in the quantity demanded of movie tickets.
  - B) a decrease in the quantity demanded of movie tickets.
  - C) an increase in the demand for movie tickets.
  - D) a decrease in the demand for movie tickets.

Answer: A

Diff: 1 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 91) The income effect of a decrease in the price of macaroni and cheese (assume this is an inferior good) results in
- A) a decrease in the demand for macaroni and cheese.
  - B) an increase in the quantity demanded of macaroni and cheese.
  - C) a decrease in the quantity demanded of macaroni and cheese.
  - D) an increase in the demand for macaroni and cheese.

Answer: C

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 92) The income effect of an increase in the price of peaches is
- A) the change in the quantity demanded of peaches that results from the price increase making peaches more expensive than other fruit, holding constant the effect of the price change on consumer purchasing power.
  - B) the change in the demand for peaches as a result of the change in the price of peaches, holding all other factors constant.
  - C) the change in the quantity demanded of other fruit that results from the impact of the price change on purchasing power, holding all other factors constant.

- D) the change in the quantity demanded of peaches that results from the effect of the change in price on consumer purchasing power, holding all other factors constant.

Answer: D

Diff: 3 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 93) The substitution effect of an increase in the price of peaches is
- A) the change in the quantity demanded that results from a change in the price of peaches making peaches more expensive relative to other goods, holding constant the effect of the price change on consumer purchasing power.
  - B) the change in the demand for nectarines (a substitute good) that results when peaches become more expensive relative to nectarines, holding constant the effect of the price change on consumer purchasing power.
  - C) the change in the quantity demanded of peaches that results from the effect of the change in the price of peaches on the consumer's purchasing power.
  - D) the change in the demand for peaches that results when the price of peaches increases.

Answer: A

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 94) The French Bakery ran a special which decreased the price of its croissants from \$1.50 to \$1.00. Although her money income had not changed, Toni decided to buy 2 croissants instead of her usual 1 bagel and 1 croissant. Toni's actions are explained by which of the following?
- A) income effect only or substitution effect only but not both effects
  - B) income and substitution effects
  - C) price effect
  - D) consumption effect

Answer: B

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 95) The income effect of a decrease in the price of legal services, a normal good, results in
- A) a decrease in the demand for legal services.
  - B) a decrease in the quantity demanded of legal services.
  - C) an increase in the quantity demanded of legal services.
  - D) an increase in the demand for legal services.

Answer: C

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 96) A change in the price of a good has two effects on the quantity consumed. What are these effects?

A) the income effect and the substitution effect  
 B) the utility effect and the budget effect  
 C) the total utility effect and marginal utility effect  
 D) the consumption effect and expenditure effect

Answer: A

Diff: 1 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 97) If you received negative marginal utility from consuming the 4th slice of pizza, then your total utility from 4 slices of pizza must be less than your total utility from 3 slices of pizza.

Answer: TRUE

Diff: 2 Page Ref: 307

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 98) When diminishing marginal utility sets in, total utility must be negative.

Answer: FALSE

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 99) A consumer maximizes her total utility from a bundle of goods when her marginal utility from each good is equal.

Answer: FALSE

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 100) The economic model of consumer behavior explains how consumers' tastes and preferences are formed.

Answer: FALSE

Diff: 1 Page Ref: 306

Topic: Consumer Behavior

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 101) The income effect of a price increase causes a decrease in the quantity demanded of a normal good.

Answer: TRUE

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 102) The substitution effect of a price increase causes a decrease in the quantity demanded of an inferior good.

Answer: TRUE

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 103) The substitution effect of a change in the price of cauliflower is the portion of the change in the quantity of cauliflower demanded that can be attributed to the change in the price of a substitute vegetable such as asparagus.

Answer: FALSE

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 104) To maximize utility consumers should buy goods and services to the point where the marginal utility of each item consumed is equal.

Answer: FALSE

Diff: 2 Page Ref: 309

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 105) In explaining consumer behavior economists explain how consumer tastes and preferences are formed.

Answer: FALSE

Diff: 1 Page Ref: 306–307

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 106) If by purchasing more apples and fewer oranges you increase your total utility, then apples must be cheaper than oranges.

Answer: FALSE

Diff: 1 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 107) Economists assume people's tastes are identical.

Answer: FALSE

Diff: 1 Page Ref: 306

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 108) Economists do not think it is possible to compare the relative utility that two people get from consuming an additional unit of a particular good.

Answer: TRUE

Diff: 1 Page Ref: 306–307

Topic: Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 109) What is marginal utility and what is the law of diminishing marginal utility?

Answer: Marginal utility is the change in total satisfaction a person receives from consuming one additional unit of a good or service. The law of diminishing marginal utility is the principle that consumers experience diminishing additional satisfaction as they consume more of a good or service during a given period of time.

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 110) You participate in a taste test for a new protein supplement called "Boost." You are given five consecutive one ounce vials of the supplement and after consuming each vial you are asked to note your reaction. You consume the first vial and your response is: "Hmmm, quite good!" After the second, you say, "Not bad at all." After the third, you note, "It's alright." and after the fourth you wince, "No more, the after-taste is getting to me. I need water." What economic principle does this scenario illustrate? Define the principle.

Answer: It illustrates the law of diminishing marginal utility which states that consumers experience diminishing additional satisfaction as they consume more of a good or service during a given period of time.

Diff: 2 Page Ref: 307

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 111) The increase in consumption of a good when its price falls is caused by two effects. What are these two effects? Explain the difference between these effects.

Answer: The two effects are the substitution and income effects. According to the substitution effect, more is consumed when the price of a good falls because the price of the good in question is now lower relative to the prices of other goods. In addition, the fall in price increases the consumer's purchasing power causing the quantity demanded to increase for a normal good and decrease for an inferior good. This is the income effect. For most goods, the income effect is small relative to the substitution effect which is why the overall effect of a price decrease is an increase in quantity demanded.

Diff: 2 Page Ref: 313–314

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 112) You wish to buy only one CD. Use the rule of equal marginal utility per dollar to determine which one to purchase: (a) Usher's latest CD for \$15 which gives you 75 units of utility, or (b) Tom Petty and the Heartbreakers' Greatest Hits for \$10 that gives you 100 units of utility?

Answer: You should buy the Tom Petty CD because the MU per dollar is 10 while MU per dollar for the Usher CD is only 5.

Diff: 1 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 113) After getting an A on your economics exam, you decide to go to your favorite Mexican restaurant to celebrate. You are having trouble deciding whether to order the chipotle chicken chimichanga or the cilantro seafood enchiladas. Use the rule of equal marginal utility per dollar to determine which one to purchase: (a) the chimichanga for \$8 which gives you 120 units of utility, or (b) the enchiladas for \$15 which gives you 195 units of utility?

Answer: You should buy the chimichanga because the MU per dollar is 15 while MU per dollar for the enchiladas is only 13.

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 114) Eliza consumes 12 cappuccinos and 8 apple turnovers per week. The price of cappuccino is \$4 each and apple turnovers are \$1 each.
- What is the amount of income allocated to cappuccino and apple turnover consumption?
  - What is the price ratio (the price of cappuccino relative to the price of apple turnovers)?
  - Explain the meaning of the price ratio you computed.
  - If Eliza maximize utility, what is the ratio of the marginal utility of cappuccino to the marginal utility of apple turnovers?
  - If the price of apple turnovers falls, will Eliza consume more apple turnovers, fewer apple turnovers or the same amount of apple turnovers? Explain your answer using the rule of equal marginal utility per dollar.

Answer: a. Income = \$56

b. Price of cappuccino / price of apple turnovers = \$4 / \$1 = 4

c. To buy a cappuccino, Eliza has to give up 4 apple turnovers.

d.  $MU_{\text{cappuccino}} / MU_{\text{apple turnovers}} = \text{Price of cappuccino} / \text{Price of apple turnovers} = \$4 / \$1 = 4$

e. If the price of apple turnovers falls, the marginal utilities per dollar will not be equal. Specifically,  $MU_{\text{cappuccino}} / \text{Price cappuccino} < MU_{\text{apple turnovers}} / \text{Price apple turnovers}$ . Eliza can raise her total utility by buying more apple turnovers and less cappuccino.

Diff: 3 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking



- 115) Arnie Ziffel has \$20 per week to spend on any combination of pineapples and green tea. The price of a pineapple is \$4 and the price of a bottle of green tea is \$2. The table below shows Arnie's utility values. Use the table to answer the questions that follow the table.

Quantity of Pineapples	Total Utility	Marginal Utility	Marginal Utility per Dollar	Quantity of Green Tea	Total Utility	Marginal Utility	Marginal Utility per Dollar
1	32			1	28		
2	52			2	46		
3	64			3	54		
4	68			4	60		
5	70			5	64		
6	71			6	66		
7	71			7	67		

- a. Complete the table by filling in the blank spaces.  
 b. Suppose Arnold purchases 4 pineapples and 2 bottles of green tea. Is he consuming the optimal consumption bundle? If so, explain why. If not, what combination should he buy and why?

Answer: a.

Quantity of Pineapples	Total Utility	Marginal Utility	Marginal Utility per Dollar	Quantity of Green Tea	Total Utility	Marginal Utility	Marginal Utility per Dollar
1	32	32	8	1	28	28	14
2	52	20	5	2	46	18	9
3	64	12	3	3	54	8	4
4	68	4	1	4	60	6	3
5	70	2	0.5	5	64	4	2
6	71	1	0.25	6	66	2	1
7	71	0	0	7	67	1	0.5

- b. If Arnold purchases 4 pineapples and 2 bottles of green tea, he is not maximizing his utility. The marginal utility per dollar spent on pineapples = 1 and the marginal utility per dollar spent on green tea = 9. His total utility from this bundle is 114 utils. If he buys 3 pineapples and 4 bottles of green tea, he will equate his marginal utilities per dollar and the total utility from this bundle = 124.

Diff: 2 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 116) The Wong family consumes 3 pounds of fish and 5 pounds of chicken per month. The price of fish is \$8 per pound and chicken is \$4 per pound.
- What is the amount of income allocated to fish and chicken consumption?
  - What is the price ratio (the price of fish relative to the price of chicken)?
  - Explain the meaning of the price ratio you computed.
  - If the Wongs maximize utility, what is the ratio of the marginal utility of fish to the marginal utility of chicken?

e. If the price of chicken rises, will the Wong family consume more chicken, less chicken or the same amount of chicken? Explain your answer using the rule of equal marginal utility per dollar.

Answer: a. Income = \$44

b. Price of fish / price of chicken =  $\$8 / \$4 = 2$

c. To buy a pound of fish the family has to give up 2 pounds of chicken.

d.  $MU_{\text{fish}} / MU_{\text{chicken}} = \text{Price of fish} / \text{Price of chicken} = \$8 / \$4 = 2$

e. If the price of chicken rises, the marginal utilities per dollar will not be equal.

Specifically,  $MU_{\text{fish}} / \text{Price fish} > MU_{\text{chicken}} / \text{Price chicken}$ . The family can raise its total utility by buying less chicken and more fish.

Diff: 3 Page Ref: 307–310

Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 117) Lilly Davis has \$5 per week to spend on any combination of ice cream and candy. The price of an ice cream cone is \$2 and the price of a candy bar is \$1. The table below shows Lilly's utility values. Use the table to answer the questions that follow the table.

Quantity of Ice Cream Cones	Total Utility	Marginal Utility	Marginal Utility per Dollar	Quantity of Candy	Total Utility	Marginal Utility
1	20			1	20	
2	38			2	38	
3	52			3	48	
4	62			4	54	

a. Complete the table by filling in the blank spaces.

b. Suppose Lilly purchases 2 ice cream cones and 1 candy bar. Is she consuming the optimal consumption bundle? If so, explain why. If not, what combination should she buy and why?

Answer: a.

Quantity of Ice Cream Cones	Total Utility	Marginal Utility	Marginal Utility per Dollar	Quantity of Candy	Total Utility	Marginal Utility
1	20	20	10	1	20	20
2	38	18	9	2	38	18
3	52	14	7	3	48	10
4	62	10	5	4	54	6

b. If Lilly purchases 2 ice cream cones and 1 candy bar she is not maximizing her utility. The marginal utility per dollar spent on ice cream cones = 9 and marginal utility per dollar spent on candy bars = 20. Her total utility from this bundle is 58 utils. If she buys 1 ice cream cone and 3 candy bars, she will equate her marginal utilities per dollar and the total utility from this bundle = 68.

Diff: 2 Page Ref: 307–310

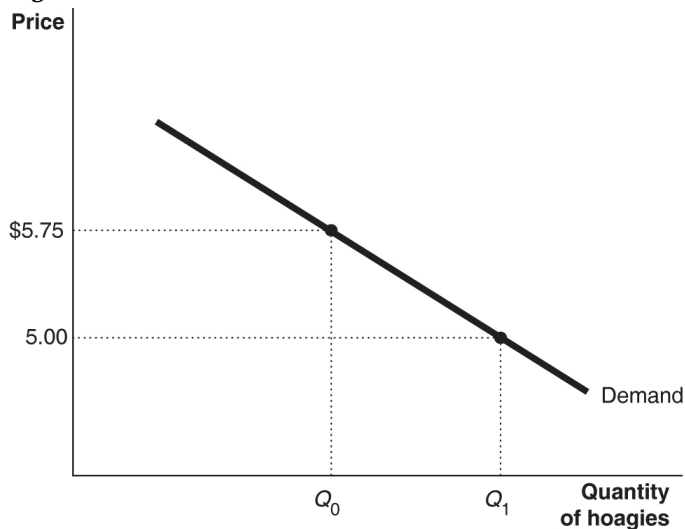
Topic: Marginal Utility

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

## 10.2 Where Demand Curves Come From

Figure 10-1



- 1) *Refer to Figure 10-1.* When the price of hoagies increases from \$5.00 to \$5.75, quantity demanded decreases from  $Q_1$  to  $Q_0$ . This change in quantity demanded is due to
- A) the price and output effects.
  - B) the income and substitution effects.
  - C) the fact that marginal willingness to pay falls.
  - D) the law of diminishing marginal utility.

Answer: B

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 2) *Refer to Figure 10-1.* Which of the following statements is *true*?
- A) Quantities  $Q_0$  and  $Q_1$  are the utility-maximizing quantities of hoagies at two different prices of hoagies.
  - B) Quantities  $Q_0$  and  $Q_1$  may not necessarily be the utility-maximizing quantities of hoagies at two different prices because we have no information on the consumer's budget or the price of other goods.
  - C) Quantity  $Q_0$  could be a utility-maximizing choice if the price is \$5.75, but quantity  $Q_1$  may not be because we have no information on the marginal utility per dollar when price changes.
  - D) Quantities  $Q_0$  and  $Q_1$  are derived independently of the utility-maximizing model.

Answer: A

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 3) In order to derive an individual's demand curve for salmon, we would observe what happens to the utility-maximizing bundle when we change
- A) income and hold everything else constant.
  - B) tastes and preferences and hold everything else constant.
  - C) the price of the product and hold everything else constant.
  - D) the price of a close substitute and hold everything else constant.

Answer: C

Diff: 2 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 4) Along a downward-sloping linear demand curve
- A) the marginal utility from the consumption of each unit of the good and the total utility from consuming larger quantities increase.
  - B) the marginal utility from the consumption of each unit of the good and the total utility from consuming larger quantities remain constant.
  - C) the marginal utility from the consumption of each unit of the good falls and the total utility from consuming larger quantities increases.
  - D) the marginal utility from the consumption of each unit of the good rises and the total utility from consuming larger quantities remain constant.

Answer: C

Diff: 2 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 5) Economists Robert Jensen and Nolan Miller reasoned that to be a Giffen good, with an income effect larger than its substitution effect, a good must be \_\_\_\_\_ and make up a \_\_\_\_\_ portion of a consumer's budget.
- A) a normal good; very small
  - B) an inferior good; very small
  - C) a normal good; very large
  - D) an inferior good; very large

Answer: D

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 6) The demand curve for a Giffen good is
- A) non-linear but downward-sloping.
  - B) vertical.
  - C) upward-sloping.
  - D) non-existent.

Answer: C

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

## 7) Giffen goods

- A) are theoretical and have never been discovered in the real world.
- B) have not existed since prior to the Industrial Revolution.
- C) were proven to exist in the 1890s by Sir Robert Giffen.
- D) were not shown to actually exist until 2006.

Answer: D

Diff: 3 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

## 8) We can derive the market demand curve for gold earrings

- A) only if the tastes of all gold earring consumers are similar.
- B) by adding horizontally the individual demand curves of each gold earring consumer.
- C) by adding vertically the quantity demanded of each gold earring consumed at each price.
- D) by adding the prices each gold earring consumer is willing to pay for each quantity.

Answer: B

Diff: 1 Page Ref: 314–315

Topic: Market Demand Curve

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

## 9) The income effect due to a price decrease will result in an increase in the quantity demanded for

- A) a Giffen good.
- B) an inferior good.
- C) a public good.
- D) a normal good.

Answer: D

Diff: 2 Page Ref: 315

Topic: Income and Substitution Effects

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Figure 10–2

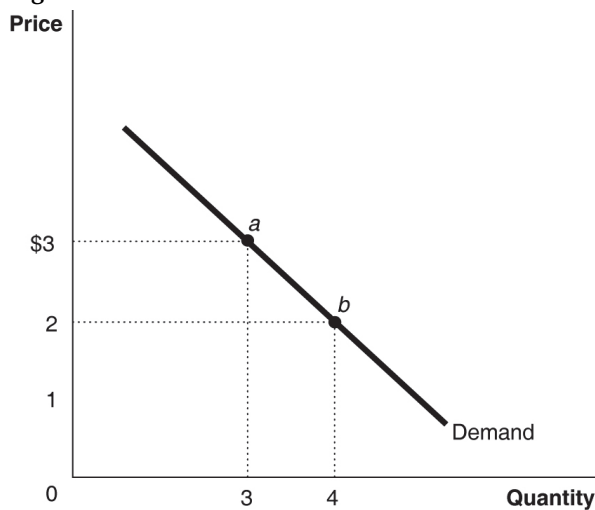


Figure 10–2 represents the demand for ice cream cones.

## 10) Refer to Figure 10–2. Which of the following statements is true?

- A) Points *a* and *b* are the utility-maximizing quantities of ice-cream cones at two different prices of ice-cream.
- B) Points *a* and *b* may not necessarily be the utility-maximizing quantities of ice-cream cones at two different prices because we have no information on the consumer's budget or the price of other goods.
- C) Point *a* could be a utility-maximizing choice if the price is \$3 but point *b* may not be because we have no information on the marginal utility per dollar when price changes.
- D) Points *a* and *b* are derived independently of the utility-maximizing model.

Answer: A

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 11) Refer to Figure 10-2. When the price of ice cream cones increases from \$2 to \$3, quantity demanded decreases from 4 ice cream cones to 3 ice cream cones. This change in quantity demanded is due to
- A) the price and output effects.
  - B) the income and substitution effects.
  - C) the law of diminishing marginal utility.
  - D) the fact that marginal willingness to pay falls.

Answer: B

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro-2: Interpret and analyze information presented in different types of graphs.

AACSB: Analytic thinking

- 12) Goods with upward sloping demand curves are referred to as
- A) Marshall goods.
  - B) Giffen goods.
  - C) substitute goods.
  - D) luxury goods.

Answer: B

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 13) For a demand curve to be upward sloping, the good would have to be an inferior good, and
- A) the income effect would have to be larger than the substitution effect.
  - B) the income effect would have to be smaller than the substitution effect.
  - C) the income effect would have to be equal to the substitution effect.
  - D) the income effect and the substitution effect would have to be nonexistent.

Answer: A

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 14) Each price–quantity combination on a consumer's demand curve shows the utility –maximizing quantity at the given price.

Answer: TRUE

Diff: 2 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 15) A Giffen good could be either a normal good or an inferior good.

Answer: FALSE

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 16) The income effect of a price increase for a Giffen good outweighs the substitution effect.

Answer: TRUE

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 17) The demand curve for an inferior good can never be downward–sloping.

Answer: FALSE

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 18) The demand curve for a luxury good is upward–sloping.

Answer: FALSE

Diff: 2 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 19) The income effect results in consumers increasing the quantity of normal goods demanded when the price falls.

Answer: TRUE

Diff: 1 Page Ref: 314–316

Topic: Where Demand Curves Come From

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 20) The demand for a Giffen good slopes upward.

Answer: TRUE

Diff: 1 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 21) The only Giffen goods that have been identified so far in the real world are luxury goods.

Answer: FALSE

Diff: 1 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 22) What is a Giffen good?

Answer: A Giffen good is something consumers buy more of when its price rises and buy less of when its price falls.

Diff: 1 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 23) What must be true in terms of the income effect, the substitution effect, and the type of good for the good's demand curve to be upward sloping?

Answer: The income effect would have to be larger than the substitution effect, and the good would have to be an inferior good.

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 24) Describe the demand curve for a Giffen good.

Answer: The demand curve for a Giffen good slopes upward, indicating that the quantity demanded increases when the price increases, and the quantity demanded falls when the price decreases.

Diff: 1 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 25) What did economists Robert Jensen and Nolan Miller determine must be true for a good to be a Giffen good, where the income effect is larger than its substitution effect?

Answer: The good must be an inferior good and it must make up a very large portion of consumer's budgets.

Diff: 2 Page Ref: 316–317

Topic: Giffen Goods

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking



### 10.3 Social Influences on Decision Making

1) Consider the following factors:

- a. culture
- b. religion
- c. customs
- d. prices
- e. income

Which of the factors above are likely to influence the choices consumers make?

- A) a, d, and e only
- B) all the factors except b
- C) all the factors except c
- D) d and e only
- E) all the factors listed

Answer: E

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

2) What is the common feature displayed by the following items?

- a. eating in a newly opened "fusion" cuisine restaurant
  - b. attending a Red Sox game in Fenway Park
  - c. wearing Lucky Brand designer jeans
- A) They are all highly inelastic goods.
  - B) The consumption of these goods takes place privately.
  - C) The consumption of these goods takes place publicly.
  - D) They tend to be consumed by better educated people.

Answer: C

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

3) Consider a good whose consumption takes place publicly. Your decision to buy that good depends

- A) both on the characteristics of the product and on how many other people are buying the good.
- B) only on the characteristics of the good.
- C) only on how many other people buy the good.
- D) only on the price of the good.

Answer: A

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 4) Which of the following does *not* explain why consumers buy products that many other consumers are already buying?
- A) technology
  - B) the satisfaction people derive by being viewed as "fashionable"
  - C) cost-effective way to gather information about a product
  - D) differences in tastes and preferences

Answer: D

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 5) Identify the one statement that does *not* demonstrate how social effects influence consumer choice.
- A) Students in an Economics class are required to purchase a textbook assigned by the professor.
  - B) There is utility gained from consuming goods or services that others are consuming.
  - C) Some products that people consume are determined by the social popularity of the products.
  - D) Companies such as Zappos.com and Netflix invite their consumers to write reviews about their experience with their products which are then posted on the internet for others to see.

Answer: A

Diff: 2 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 6) Firms pay famous individuals to endorse their products because
- A) apparently demand is affected not just by the number of people who use a product but also by the type of person that uses the product.
  - B) the firms are irrational and are wasting advertising expenditures.
  - C) famous people obviously know what are the best goods and services.
  - D) famous people only consume high quality products.

Answer: A

Diff: 2 Page Ref: 317–318

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 7) A network externality occurs when
- A) there is production cost savings from being networked with suppliers.
  - B) there is production cost savings from being networked with buyers.
  - C) the usefulness of a good is affected by how many others use the good.
  - D) the usefulness of a good is affected by celebrities who use the good.

Answer: C

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 8) Once a product becomes established, network externalities may create \_\_\_\_\_ costs that make consumers reluctant to buy a new product with better technology.
- A) external                      B) implicit                      C) switching                      D) marginal

Answer: C

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 9) A significant downside to network externalities is that
- A) there may be large switching costs to consumers of changing products so that consumers end up using products with inferior technologies.
- B) firms may network with unethical suppliers or distributors.
- C) the costs of hiring celebrity endorsements may be very high.
- D) there may be large switching costs to firms changing technologies.

Answer: A

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 10) All of the following products are most likely to have significant network externalities *except*
- A) cat food.                      B) cell phones.
- C) popular board games.                      D) fax machines.

Answer: A

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 11) Which of the following is used to explain why a consumer's willingness to buy Microsoft Office increases as the number of other people who use Microsoft Office increases?
- A) network externalities                      B) market failure
- C) diminishing marginal utility                      D) the income effect of a price change

Answer: A

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 12) A good is path dependent when
- A) consumers get utility from consuming goods that others are consuming, such as restaurants.
  - B) the first technology that was adopted has an advantage over a better technology that came later.
  - C) people who move location follow the path of people who moved before them.
  - D) it can only be used in one way.

Answer: B

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 13) A standard which came to the market first, such as the QWERTY letter layout in typewriters, can become entrenched (this layout is still used in computer keyboards today). What is this phenomenon called?
- A) network externalities
  - B) path dependency
  - C) sunk cost
  - D) comparative advantage

Answer: B

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 14) Many economists do not believe that network externalities lock consumers into the use of products that have technology inferior to other, similar products. These economists believe that
- A) consumers are always rational.
  - B) in practice, the gains from using a superior technology exceed the losses consumers incur from switching costs.
  - C) there is no good evidence that switching costs exist.
  - D) the government will prevent products with inferior technology from being sold to consumers.

Answer: B

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 15) Many airlines have not reduced or eliminated fuel surcharges despite the price of oil dropping. A logical reason for this is that the decline in fuel prices
- A) shifted the supply curve for airline tickets to the left, and at the same time an increase in demand for airline tickets shifted the demand curve to the right, so prices did not decline.
  - B) shifted the supply curve for airline tickets to the right, and at the same time a decrease in demand for airline tickets shifted the demand curve to the left, so prices still increased.
  - C) shifted the supply curve for airline tickets to the right, and at the same time an increase in demand for airline tickets shifted the demand curve to the right, so prices still increased.
  - D) shifted the supply curve for airline tickets to the left, and at the same time a decrease in demand for airline tickets shifted the demand curve to the left, so prices did not decline.

Answer: C

Diff: 2 Page Ref: 321–322

Topic: Business Implications of Fairness

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 16) Research by Daniel Kahneman, Jack Knetch, and Richard Thaler has shown that companies like airlines were explicitly able to include a fuel surcharge in their prices because
- A) consumers had no choice but to pay the price of the surcharges due to the lack of competition in the industry.
  - B) a government-imposed price ceiling on airline ticket prices left the airlines not other way to cover the increase in costs.
  - C) adding a separate fuel surcharge to the price of airline tickets did not actually increase the price of the tickets.
  - D) consumers see it as fair for firms to raise prices after an increase in costs.

Answer: D

Diff: 2 Page Ref: 321–322

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 17) For which of the following products is social influence likely to have the greatest impact?

- A) toothpaste
- B) restaurants
- C) high-blood pressure medication
- D) school textbook

Answer: B

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 18) Jamal, Lawson and Kyle have been standing in line for almost an hour waiting to be served at Kirala, a popular new Japanese restaurant. It is possible that some of the people in line won't be served at all before the restaurant closes. Which of the following could explain why the restaurant does not simply raise prices high enough to eliminate the lines?
- a. In situations where consumption takes place publicly, demand for the product is also influenced by how many other people are buying the product. Consequently, a popular restaurant that increased its prices enough to eliminate lines might find that it had also eliminated its popularity.
  - b. Firms may sometimes not raise their prices for fear that it violates people's sense of fairness and might alienate customers.
  - c. The demand for restaurant meals is relatively elastic and if the firm raise prices it will lower its profits.
- A) a only                      B) a and b only                      C) a and c only                      D) a, b, and c

Answer: B

Diff: 2 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

19) Which of the following is an experiment which tests whether fairness is important in consumer decision making?

- A) the fair trade principle
- B) the ultimatum game
- C) the preferential treatment game
- D) the behavioral experiment

Answer: B

Diff: 1 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

20) In the ultimatum game, allocators usually offer recipients at least a 40 percent share of the money, and recipients almost always reject offers of less than a 10 percent share. Which of the following does *not* explain why allocators offer recipients a relatively generous share and why recipients reject meager offers?

- A) Fear of arousing outrage and abhorrence could influence economic decisions.
- B) People can and often do reject offers that offend their sense of fairness even if doing so means taking a monetary loss.
- C) Some people are careful not to engage in economic behavior that might offend and alienate others.
- D) Allocators can count on recipients to ignore all considerations except financial benefit.

Answer: D

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

21) Economists have used \_\_\_\_\_ and \_\_\_\_\_ in experiments designed to determine whether consumers care about fairness when they make decisions.

- A) Giffen goods; luxury goods
- B) the income effect; the substitution effect
- C) the ultimatum game; the dictator game
- D) network externalities; the endowment effect

Answer: C

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

22) Traditionally, economists have considered culture, customs, and religion as

- A) very important influences on the choices consumers make.
- B) relatively unimportant factors in explaining the choices consumers make.
- C) important influences in explaining consumer choices in command economies but less important in market economies.
- D) subject to normative economic analysis rather than positive economic analysis.

Answer: B

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 23) Which of the following statements describes economists' attitudes regarding the influence of social factors on the choices consumers make?
- A) Economists formerly believed they were very important but now they believe they are not important.
  - B) Economists believe social factors affect consumer choice in markets for public goods but not in markets for private goods.
  - C) Liberal economists believe social factors are very important; conservative economists do not believe social factors have any influence on consumers.
  - D) Economists traditionally believed they were unimportant, but many economists now believe social factors are important.

Answer: D

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 24) Economists Gary Becker and Kevin Murphy are associated with which of the following?
- A) the discovery of the first example of a Giffen good
  - B) They have argued that social factors are not important in explaining the choices consumers make.
  - C) Consumers appear to receive utility from consuming goods they believe are popular.
  - D) They discovered that price changes have both income and substitution effects.

Answer: C

Diff: 1 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

### Article Summary

The article describes three key ways startup companies can get the most benefit from celebrity endorsements. One way is choosing a celebrity that can bring credibility to the company and then incorporating the celebrity into the company's marketing strategy. Second, get public relations value from the celebrity by offering exclusive interviews, contests, and photos and videos of the celebrity with the product. Finally, make sure to choose a celebrity who will represent the product at all times, giving the product maximum exposure.

Source: Kevin Tighe II, "3 Ways Startups Can Turn Celebrity Endorsements Into Big Gains," *Forbes*, March 8, 2013.

- 25) Refer to the Article Summary. Economists refer to an increase in sales due to celebrity endorsements as being the result of
- A) network externalities.
  - B) the endowment effect.
  - C) social influence.
  - D) the ultimatum game.

Answer: C

Diff: 1 Page Ref: 317–318

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 26) **Refer to the Article Summary.** One explanation for the increase in product sales because of celebrity endorsements is that people seem to receive \_\_\_\_\_ from goods they believe are popular.

A) more utility  
B) diminishing utility  
C) greater network externalities  
D) increased path dependency

Answer: A

Diff: 2 Page Ref: 317–318

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 27) Which of the following refers to the increase in the usefulness of a product as the number of consumers who use it increases?

A) positive externalities  
B) network externalities  
C) external marginal utility  
D) the impact of celebrity endorsements

Answer: B

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 28) Which of the following is used to explain why a consumer's willingness to buy a cell phone increases as the number of other people who own and use cell phones increases?

A) network externalities  
B) market failure  
C) diminishing marginal utility  
D) the income effect of a price change

Answer: A

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 29) The order of the letters along the rows of computer keyboards could be changed to allow users to type faster, but this would inconvenience the vast majority of people who learned to type with the current keyboard layout. The costs of switching to a new layout make this change unlikely. This is an example of

A) path dependency.  
B) how social influences overwhelm the substitution effect of a price change.  
C) how the elasticity of demand for typewriters has been affected by externalities.  
D) how consumers sometimes do not behave rationally.

Answer: A



Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 30) An advantage of Microsoft windows is its compatibility with the widest range of hardware and software. The dominance of Windows is self-reinforcing: hardware and software manufacturers ensure that their products are compatible with Windows in order to have access to the large number of Windows users. Which principle best describes this scenario?

A) endowment effects  
B) endorsement effects  
C) economies of scale  
D) network externalities

Answer: D

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 31) Some economists have argued that path dependence and switching costs can lead to market failure. Which of the following is an example of this argument?

A) Costly celebrity endorsements lead many consumers to buy a product even though it is more expensive or less effective than a product that is not endorsed by a celebrity.  
B) A consumer who won a lottery for a Super Bowl ticket refuses to sell it for \$3,000 even though he would not have paid \$3,000 for a ticket if he had not won the lottery.  
C) While playing the *ultimate game*, an allocator decides to share \$20 equally with a recipient rather than keep the \$20 for herself.  
D) VHS video recorders became more popular with consumers than Sony Betamax recorders even though the Betamax recorders embodied a superior technology.

Answer: D

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 32) All but one of the following have been suggested by some economists as possible consequences of path dependency and switching costs. Which of the following is *not* a possible consequence of path dependency and switching costs?

A) Consumers may get locked into using products with inferior technology.  
B) market failure  
C) diseconomies of scale  
D) Government intervention may be necessary in affected markets in order to improve economic efficiency.

Answer: C

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 33) Some economists have suggested that network externalities result in consumers being locked into the use of products with inferior technologies. Economists Stan Leibowitz and Stephen Margolis have studied cases that have been cited as examples of this and found
- A) there is no convincing evidence that the alternative technologies were superior.
  - B) consumers sometimes do become locked into the use of products with inferior technologies.
  - C) that in all of these cases network externalities resulted in market failure.
  - D) that consumers use products with inferior technologies when their prices are lower than products with superior technologies.

Answer: A

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 34) Maurice Allais, Reinhard Selten and Vernon Smith all were awarded the Nobel Prize in Economics in part because
- A) of their work with experimental economics.
  - B) they discovered the first example of a Giffen good.
  - C) of their work on the substitution and income effects of price changes.
  - D) they proved that external economies would lead to market failure.

Answer: A

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 35) \_\_\_\_\_ is an experiment that tests the significance of fairness in consumer decision making.
- A) The fairness challenge
  - B) The consumer choice paradigm
  - C) The ultimatum game
  - D) The Giffen paradox

Answer: C

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 36) The quantity demanded of tickets to the Super Bowl is always greater than the quantity supplied. Which of the following is the best explanation why the National Football League does not raise the price of tickets to the level where the quantity demanded equals the quantity supplied?
- A) Raising the price would reduce the demand for tickets; there would then be a surplus and the game would not sell out.
  - B) The cost of raising the price and printing new tickets would exceed the revenue the NFL would receive from higher ticket prices.
  - C) The demand for Super Bowl tickets is elastic; raising the price would reduce total revenue.
  - D) The NFL is concerned that raising ticket prices would be considered unfair.

Answer: D

Diff: 2 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 37) Many airlines have not reduced or eliminated fuel surcharges despite the price of oil dropping. A logical reason for this is that the decline in fuel prices \_\_\_\_\_ the supply of airline tickets while at the same time the demand for airline tickets \_\_\_\_\_, so airline ticket prices still increased.

A) decreased; increased  
B) decreased; decreased  
C) increased; increased  
D) increased; decreased

Answer: C

Diff: 2 Page Ref: 321–322

Topic: Business Implications of Fairness

Learning Outcome: Micro–4: Explain how supply and demand function in competitive markets.

AACSB: Analytic thinking

- 38) During its run on Broadway, the play *The Producers* regularly sold out all available tickets at the St. James Theater. The theater could have raised ticket prices from \$75 to \$125 and still sold all available tickets but chose not to do so. The best explanation for this decision is

A) theater owners are unaware of the elasticity of demand for Broadway shows.  
B) theater owners do not want to raise their tickets on weekends, when demand is high, and then have to lower prices during the week, when demand is lower.  
C) firms sometimes give up profits in the short run to keep their customers happy and increase their profits in the long run.  
D) theater owners are not motivated to maximize their profits.

Answer: C

Diff: 1 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 39) All but one of the following economists were awarded a Nobel prize for their contributions to experimental economics and their explorations of the influence fairness has on consumer decision-making. Which economist *did not* receive a Nobel Prize for this work?

A) Vernon Smith  
B) Alan Krueger  
C) Daniel Kahneman  
D) Maurice Allais

Answer: B

Diff: 1 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 40) In an experiment that employed the *dictator game*, economists at Cornell University gave student "allocators" the option of dividing \$20 in only two ways (a) \$18 for themselves and \$2 to another student, or (b) \$10 for themselves and \$10 to another student. What was one result from this experiment?

A) Most allocators chose to give themselves \$18 and \$2 to the other students.  
B) Most of the students who were not allocators did not like having someone else make decisions for them.

- C) A majority of the female allocators chose option (a); a majority of the male allocators chose option (b).
- D) Most of the allocators apparently valued acting fairly.

Answer: D

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 41) Economists have used the ultimatum game and the dictator game in experiments designed to determine
- A) whether consumers care about fairness when they make decisions.
  - B) whether consumers believe it is fair for producers to raise the price of a product for which there is excess demand.
  - C) whether consumers understand the difference between implicit costs and explicit costs.
  - D) whether consumers understand the rule of equal marginal utility per dollar spent.

Answer: A

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 42) Many people leave their servers tips in restaurants, even when they are not likely to visit the restaurant again. This is evidence that
- A) people would rather pay for good service at an inexpensive restaurant than pay higher prices and receive poor service at an expensive restaurant.
  - B) people enjoy eating at restaurants more than eating at home.
  - C) people treat others fairly even if doing so makes them worse off financially.
  - D) there has been an improvement in the service people receive in restaurants over time, partly because the restaurant industry has become more competitive.

Answer: C

Diff: 1 Page Ref: 320–321

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 43) In their surveys of consumers, Daniel Kaheman, Jack Knetsch and Richard Thaler found that
- A) most people considered it unfair for firms to raise their prices because of an increase in their costs, but fair to raise their prices after an increase in demand.
  - B) most people considered any increase in price to be unfair as it led to an increase in profits.
  - C) most people believed that low income people were hurt most by increases in prices.
  - D) most people considered an increase in price by firms following an increase in their costs to be fair but believed it was unfair for firms to raise their prices because of an increase in demand.

Answer: D

Diff: 2 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 44) In a survey of consumers, Daniel Kaheman, Jack Knetsch and Richard Thaler asked their opinion of a hardware store's decision to
- A) go out of business because a larger hardware store opened in the same city; 82 percent of those surveyed believed it was unfair for the larger store to compete with the smaller store.
  - B) raise the price of snow shovels the day following a snowstorm; 82 percent of those surveyed believed this was unfair.
  - C) sell tickets to sporting and cultural events at prices higher than prices paid at the ticket windows for the same events; 82 percent of those surveyed believed this was unfair.
  - D) remain in business even though the store was not making an economic profit; 82 percent of those surveyed believed it would be unfair for the store to go out of business if there no other hardware stores in the same area.

Answer: B

Diff: 2 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

- 45) A network externality refers to a situation in which the usefulness of a product decreases with the number of consumers who use it.

Answer: FALSE

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 46) Economists have shown that when the ultimatum game experiment is carried out, both allocators and recipients act as if fairness is important.

Answer: TRUE

Diff: 1 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 47) The iPod is a product without any significant network externalities.

Answer: FALSE

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 48) The ultimatum game and the dictator game are used in economic experiments to test whether fairness is an important influence on consumer decision-making.

Answer: TRUE

Diff: 1 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 49) Results of the ultimatum game indicate that most people value fairness enough that they will refuse to participate in a transaction they consider unfair, even if they are worse off financially as a result.

Answer: TRUE

Diff: 1 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 50) A network externality causes firms to sacrifice profits in the short run in order to satisfy their customers and increase their long-run profits.

Answer: FALSE

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 51) Why might network externalities result in products that contain inferior technologies?

Answer: Network externalities can create significant switching costs related to changing products. When a product becomes established, consumers may find it too costly to switch to a new product that contains a better technology.

Diff: 2 Page Ref: 318–319

Topic: Network Externalities

Learning Outcome: Micro–22: Explain how externalities affect market efficiency.

AACSB: Analytic thinking

- 52) List three reasons why demand for a product will often increase if the product is endorsed by a celebrity.

Answer: 1. Consumers may believe that the celebrity is particularly knowledgeable about the product.  
2. Buying the product may make people feel closer to the celebrity.  
3. Buying the product may make people feel fashionable.

Diff: 2 Page Ref: 317

Topic: Social Influences on Decision Making

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 53) Music writer Anthony Kuzminski praised rock star Tom Petty in a 2007 article in the online *Unrated Magazine*. Kuzminski wrote: "Something Petty never can get enough credit for is his fan-friendly attitude. He kept ticket prices for [his concerts] at \$50 when other acts this summer are charging upwards of \$100 for stadium gigs. Petty could charge more, but he doesn't see the point. He has stated time and time again he still makes millions when he's on the road, regardless of his ticket prices. He is the last of the fan friendly rock stars out there." Use economic reasoning to write a rationale for Tom Petty's decision to charge prices for his band's ("Tom Petty and the Heartbreakers") concerts that are less than market clearing prices.

Source: Anthony Kuzminski, "Tom Petty & The Heartbreakers at the Vic Theater"

<http://www.unratedmagazine.com/>

Answer: Tickets to Tom Petty's concerts consistently sell at prices lower than tickets to concerts by other well-known rock bands. This means that he and the Heartbreakers earn lower profits in the short run but his actions ensure the loyalty of concert goers, and profits, in the long run.

Diff: 2 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

54) Explain the concept of network externalities.

Answer: A network externality is a situation in which the usefulness of a product increases with the number of consumers who use it.

Diff: 1 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

55) Studies on consumer behavior have found that most people value fairness enough that they will refuse to participate in transactions they consider unfair, even if they are worse off as a result. How does this affect a firm's decision to raise prices in the event of a temporary increase in demand?

Answer: If the firm chooses to raise prices, consumers will consider this price increase unfair and might choose to buy elsewhere. This loss of consumer goodwill could lead to lower profits in the long run. It is rational for firms to forego raising prices in the short run to keep customers happy. This can lead to increased profits in the long run.

Diff: 2 Page Ref: 320–321

Topic: Business Implications of Fairness

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

56) Economists have noted that businesses of a certain type tend to congregate geographically, attracting workers with skills in those fields. This, in turn, lures more firms seeking employees with those skills. Some examples include commercial banking, software development, and the automobile industry. What mechanism is at work here? Briefly explain how the mechanism works to the advantage of employers and employees.

Answer: The mechanism at work is a network externality. Employers will have access to a larger pool of skilled employees. At the same time, the efficiency of the job search for employees will be enhanced. In addition, industries are likely to draw ancillary services which could yield further efficiency gains for producers.

Diff: 2 Page Ref: 318

Topic: Network Externalities

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 57) Professor Parallax chooses two students in his economics class, Jasmine and Cassandra, to participate in the ultimatum game. He chooses Jasmine to be the allocator and Cassandra to be the recipient. He gives Jasmine \$50 and as the allocator, she gets to decide how to split the money with Cassandra. If Cassandra decides to accept the amount allocated to her by Jasmine, both students get to keep the money. If Cassandra decides to reject her allocation, neither student gets to keep the money. How much will each student end up with if each student acts as if fairness is important? How much will each student end up with if only Cassandra acts as if fairness is important? How much will each student end up with if neither student cares about fairness?

Answer: If both students care about fairness, each will end up with \$25. If only Cassandra, the recipient, cares about fairness, each student will end up with nothing since she would reject any split of the money other than \$25 and \$25. If neither student cares about fairness, Jasmine will give up as little as possible without leaving Cassandra with nothing. The split in this case will be \$49.99 to Jasmine and \$0.01 to Cassandra.

Diff: 2 Page Ref: 319–320

Topic: Experimental Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

## 10.4 Behavioral Economics: Do People Make Their Choices Rationally?

- 1) What is behavioral economics?

- A) the study of how people make wealth-maximizing decisions
- B) the study of how people behave in the face of scarcity
- C) the study of situations in which people act in ways that are not economically rational
- D) the study of how people make decisions at the margin

Answer: C

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 2) The observation that people tend to value something more highly when they own it than when they don't is called the

- A) wealth effect.
- B) endowment effect.
- C) path dependent effect.
- D) endorsement effect.

Answer: B

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking



3) What is the endowment effect?

- A) the phenomenon that economic agents are endowed with different qualities and abilities so that trade among individuals increase efficiency
- B) the tendency for economic agents with abundant resources to consume a proportionately greater quantity of goods and services
- C) the tendency of people to be unwilling to sell something they already own even if they are offered a price that is greater than the price they would be willing to pay to buy the good if they didn't already own it.
- D) the tendency of firms to use celebrities endowed with good looks to promote their products

Answer: C

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

4) The endowment effect suggests that that people

- A) have a strong attachment to their entitlement, regardless of whether they paid to acquire them.
- B) have a strong sense of fairness.
- C) are concerned about the welfare of others.
- D) act in ways to distort market prices.

Answer: A

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

5) If you exhibit the endowment effect as a decision maker, then you are

- A) deciding on the basis of sunk costs.
- B) buying something you can't really afford because you expect to save in the future.
- C) ignoring non-monetary opportunity costs.
- D) consuming based on celebrity endorsements.

Answer: C

Diff: 2 Page Ref: 328

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

6) Which of the following demonstrates the endowment effect?

- A) Whelan inherits a cottage in Cape Cod from his grandfather and is unwilling to sell it for sentimental reasons.
- B) Robert Pattinson commands a premium in the movie industry because he is endowed with dashing looks.
- C) Isabella was not willing to part with her "Robert Pattinson" poster although she was offered \$100 for it, a sum greater than what it costs to purchase another such poster.
- D) If you received a good as a gift, you are less likely to attach a monetary value to the good.

Answer: C

Diff: 2 Page Ref: 328

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 7) The average price of gasoline in your neighborhood is \$3.53 per gallon. Your neighbor, Diana tells you that you can "save a lot" by frequenting a gas station 20 miles outside your neighborhood where the price of gasoline is \$3.46 per gallon. However, she cautions you that there usually long lines at that station. Is her suggestion beneficial to you?
- A) Yes, since gasoline is a necessity for car owners, the total cost savings would be relatively substantial.
  - B) No, if one factors in the non-monetary opportunity costs (driving time and waiting in line), it could prove more costly to go to the lower-priced gasoline station.
  - C) Yes, the lower price of gasoline at the rival station increases my purchasing power and enables me to consume more of other goods.
  - D) No, my friend is misled; clearly, the lower priced gasoline must be of inferior quality and could damage vehicles.

Answer: B

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 8) Consider the following hypothetical scenarios:
- Scenario A: You are about to purchase a pair of 7 for All Mankind jeans for \$175 and a t-shirt for \$45. The sales attendant at the store tells you that the pair of jeans you wish to buy is on sale for \$160 at another store, located about a 20-minute drive away.
- Scenario B: You are about to purchase a pair of 7 for All Mankind jeans for \$175 and a t-shirt for \$45. The sales attendant at the store tells you that the t-shirt you wish to buy is on sale for \$30 at another store, located about a 20-minute drive away.

Based on standard economic theory, under which scenario would you make the 20-minute trip to the other store?

- A) Scenario A because the pair of jeans is a very expensive item and \$15 saving is quite substantial
- B) Scenario B because a \$15 saving amounts to a substantial discount (about 33 percent)
- C) in either scenario if I think a \$15 savings is worth the 20-minute trip
- D) in none of these scenarios if I think the \$15 saving is not worth the 20-minute trip
- E) C and D are correct answers.

Answer: E

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 9) Psychologists Daniel Kahneman and Amos Tversky conducted the following experiments by asking a sample of people the following questions:

Scenario A: "Imagine that you have decided to see a play and paid the admission price of \$10 per ticket. As you enter the theater you discover that you have lost the ticket. The seat was not marked and the ticket cannot be recovered. Would you pay \$10 for another ticket?"

Scenario B: "Imagine that you have decided to see a play where admission is \$10 per ticket. As you enter the theater you discover that you have lost a \$10 bill. Would you still pay \$10 for a ticket for the play?"

As long as additional tickets are available, there's no meaningful difference between losing \$10 in cash before buying a ticket, and losing the \$10 ticket after buying it. In both cases, you are out \$10. Yet, far more subjects (88 percent) in Scenario B say they would pay \$10 for another ticket and see the play while in Scenario A, only 46 percent of the subjects say they would be willing to spend another \$10 to see the play.

Which of the following is the best explanation for the results of the experiment?

- A) The endowment effect applies in Scenario A since people already own the ticket and therefore it is more valuable but this is not so in Scenario B.
- B) In Scenario B, people had not anticipated spending an additional \$10 so in effect the price of the ticket is \$20 and not \$10 whereas in Scenario A, the price of the ticket is still \$10.
- C) In Scenario A, people make an immediate connection between the lost ticket and the play and feel poorer by incorrectly assigning a greater value to the value of the ticket whereas in Scenario B, they do not make the connection between the lost \$10 bill and the play.
- D) The net benefit derived from watching the play is lower in Scenario A where the effective cost is \$20 compared to the net benefit in Scenario B.

Answer: C

Diff: 3 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 10) Most film processing companies have a policy of printing every picture on a roll of film and allowing customers to request a refund for pictures that were not clearly developed. The companies do this knowing that most customers do not ask for refunds. This is an example of consumers

- A) failing to ignore sunk costs.
- B) being overly optimistic about their future behavior.
- C) not taking nonmonetary opportunity costs into account.
- D) not making themselves aware of the policy regarding refunds.

Answer: C

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

11) Sunk costs

- A) are costs associated with repairing something you already own.
- B) are important for optimal decision making.
- C) are costs that have already been paid and cannot be recaptured in any significant way.
- D) are costs that firms sink into marketing.

Answer: C

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

12) Which of the following is a common mistake consumers commit when they make decisions?

- A) They take into account nonmonetary opportunity costs but ignore monetary costs.
- B) They are overly pessimistic about their future behavior.
- C) They fail to ignore sunk costs.
- D) They sometimes value fairness too much.

Answer: C

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

13) Which of the following is *not* a common mistake made by consumers?

- A) the failure to take into account the implicit costs of an activity
- B) the failure to ignore sunk costs
- C) being overly optimistic about their future behavior
- D) being overly pessimistic about their future behavior

Answer: D

Diff: 1 Page Ref: 325

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

14) Grace Makutsi finally bought a pair of blue shoes that she had been coveting for a long time. In less than a week she discovered that the shoes were uncomfortable. Grace went back to wearing her old pair and stashed away the new pair. When asked by her boss, Mme. Ramotswe why does she not simply give away the new pair, she said: "But I paid so much for them." Grace's behavior

- A) is rational: she should not discard a valuable item.
- B) ignores the fact that the purchase price is now a sunk cost and has no bearing on whether she should give them away or not.
- C) supports the endowment effect which states that ownership of an item makes it more valuable.
- D) is rational because the more you pay for an item the more valuable it is.

Answer: B

Diff: 2 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 15) Standard economic theory asserts that sunk costs are irrelevant in making economic decisions, yet studies conducted by behavioral economists reveal that sunk costs often affect economic decisions. Which of the following could explain this observation?
- A) People measure the value of a good in terms of its purchase price.
  - B) Even though sunk costs cannot be recovered, it has been incurred and therefore should be treated as part of the product's value.
  - C) If consumers maximize their utility, it makes sense to consider the full purchase price of a product in their consumption decisions.
  - D) Sunk costs have a higher opportunity cost than costs that can be recovered.

Answer: A

Diff: 2 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 16) Arnold Kim began blogging about Apple products during his fourth year of medical school. Kim's Website, MacRumors.com, became so successful that he decided to give up his medical career and work full time on his Website, despite the nearly \$200,000 he had invested in his education. In making his decision, Kim decided to ignore the money and time he spent on his education. Economists would say that Kim made a
- A) rational decision to ignore these sunk costs.
  - B) poor decision since he had already invested his time and money on his medical career.
  - C) poor decision since doctors are in greater demand than bloggers.
  - D) hasty decision by not waiting to recoup his financial investment before giving up his medical career.

Answer: A

Diff: 2 Page Ref: 325

Topic: Sunk Cost

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 17) A study discussed in the Making the Connection feature in the text found that there is \_\_\_\_\_ that some consumers are not well aware of prices, even for goods they buy regularly.
- A) no evidence
  - B) substantial evidence
  - C) little evidence
  - D) no reason to believe

Answer: B

Diff: 1 Page Ref: 327-328

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 18) Behavioral economics helps explain why customers \_\_\_\_\_ at J.C. Penney.
- A) favored the policy of everyday low prices and not sales and coupons
  - B) favored sales and coupons and not the policy of everyday low prices
  - C) were equally happy with sales and coupons and the policy of everyday low prices
  - D) responded negatively to both sales and coupons and the policy of everyday low prices

Answer: B

Diff: 2 Page Ref: 326–327

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 19) A new area of economics studies situations in which people appear to be making choices that do not appear to be economically rational. This area is called
- A) behavioral economics.
  - B) irrational economics.
  - C) social economics.
  - D) new wave economics.

Answer: A

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 20) Behavioral economics refers to the study of situations
- A) where consumers and firms appear to make choices that are appropriate to reach their goals.
  - B) where consumers and firms appear to value fairness when they make choices.
  - C) where consumers and firms disobey the laws of demand and supply.
  - D) where consumers and firms do not appear to be making choices that are economically rational.

Answer: D

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 21) One reason that consumers and businesses might not act rationally is
- A) it is difficult to obtain enough information about the elasticities of demand and supply.
  - B) they may not realize their actions are inconsistent with their goals.
  - C) consumer tastes change constantly.
  - D) they do not always value fairness when they make choices.

Answer: B

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 22) The highest-valued alternative that must be given up to engage in an activity is the definition of
- A) utility.
  - B) implicit cost.
  - C) opportunity cost.
  - D) economic sacrifice.

Answer: C

Diff: 1 Page Ref: 323

Topic: Opportunity Cost

Learning Outcome: Micro-20: Apply the concepts of opportunity cost, marginal analysis, and present value to make decisions.

AACSB: Analytic thinking

- 23) Which of the following is a common mistake made by consumers?

- A) taking into account the implicit costs of an activity
- B) ignoring sunk costs
- C) being overly optimistic about their future behavior
- D) being overly pessimistic about their future behavior

Answer: C

Diff: 1 Page Ref: 325–326

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 24) Alan Krueger conducted a survey of fans at the 2001 Super Bowl who purchased tickets to the game for \$325 or \$400. Krueger found that (a) 94 percent of those surveyed would not have paid \$3,000 for their tickets, and (b) 92 percent of those surveyed would not have sold their tickets for \$3,000. These results are evidence of

- A) the high value fans place on watching the Super Bowl in person, rather than on television.
- B) the failure of consumers to take into account nonmonetary opportunity costs.
- C) the failure of consumers to ignore sunk costs.
- D) consumers being overly optimistic about their future behavior.

Answer: B

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 25) Alan Krueger conducted a survey of fans at the 2001 Super Bowl who purchased tickets to the game for \$325 or \$400. Krueger found that (a) 94 percent of those surveyed would not have paid \$3,000 for their tickets, and (b) 92 percent of those surveyed would not have sold their tickets for \$3,000. These results are an example of

- A) the tendency of people to be unwilling to sell a good they already own even if they are offered a price that is greater than the price they would be willing to pay if they did not already own it.
- B) the tendency for consumers to account for monetary costs but to ignore sunk costs.
- C) consumers placing a high value on a product because it makes them appear to be fashionable.
- D) the law of demand.

Answer: A

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 26) Alan Krueger conducted a survey of fans at the 2001 Super Bowl who purchased tickets to the game for \$325 or \$400. Krueger found that (a) 94 percent of those surveyed would not have paid \$3,000 for their tickets, and (b) 92 percent of those surveyed would not have sold their tickets for \$3,000. These results are an example of

- A) rational consumer behavior.
- B) the endowment effect.
- C) the fallacy of composition.
- D) the failure to ignore sunk costs.

Answer: B

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 27) What is the endowment effect?

- A) the tendency of people to be unwilling to sell something they already own even if they are offered a price that is greater than what they would be willing to pay to buy the good if they did not already own it
- B) the tendency of people to be unwilling to sell something they already own because of its sentimental value
- C) the tendency of people to overstate the value of a good they already own even though similar items can be purchased at a lower price
- D) the sum total of assets that a person has acquired over the years

Answer: A

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 28) Costs that have already been incurred, and which cannot be recovered, are known as

- A) short-run fixed costs.
- B) implicit costs.
- C) unavoidable costs.
- D) sunk costs.

Answer: D

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 29) A sunk cost is

- A) another term that means opportunity cost.
- B) a term used to describe the cost of capital that the owners of a firm sink into their business.
- C) the highest valued alternative that must be given up to engage in an activity.
- D) a cost that has already been paid and cannot be recovered.

Answer: D



Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 30) Suppose you pre-ordered a non-refundable movie ticket to *X-Men: Days of Future Past*. On the day of the movie you decide that you would rather not go to the movie. According to economists, what is the rational thing to do?
- A) Since the cost of the movie ticket is a sunk cost, it should not influence your decision. Your decision should be based solely on whether you want to see the movie or not.
  - B) You should not waste resources. Since you have paid for the ticket you should watch the movie.
  - C) You should go to the movie to minimize your losses.
  - D) You should go to the movie to maximize your utility.

Answer: A

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 31) Harvey Miller owns a baseball that was hit for a home run by Ted Williams. Harvey, a long-time Boston Red Sox fan, recently refused to sell his baseball for \$75,000 even though he would not have paid someone more than \$10,000 for the baseball if he did not already own it. Harvey explained his decision not to sell the baseball by noting that: "Ted Williams was my hero. This baseball has a great deal of sentimental value for me." Which of the following can explain Harvey's behavior?
- A) the difference between implicit and explicit costs
  - B) the scarcity of home run baseballs hit by Ted Williams
  - C) the endowment effect
  - D) how social influences can affect consumption choices

Answer: C

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 32) Arnold Kim began blogging about Apple products during his fourth year of medical school. Kim's website, MacRumors.com, became so successful that he decided to give up his medical career and work full time on his website, despite the nearly \$200,000 he had invested in his education. In making his decision, the \$200,000 he spent on his education
- A) should be ignored since it represents a sunk cost.
  - B) should be considered since it is money he has spent and needs to recoup.
  - C) should be ignored only if Kim can earn more than \$200,000 by running his website.
  - D) should be considered since it is money he could have used to invest in his website.

Answer: A

Diff: 2 Page Ref: 325

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 33) Health Clubs typically experience an increase in one-year memberships in January, but many new customers cancel their memberships before the end of the year. Which of the following is the best explanation for this behavior?

- A) Some health club members suffer minor injuries that prevent them from working out.
- B) Some people are overly optimistic about their future behavior.
- C) Some people fail to treat their membership fees as sunk costs.
- D) Some members receive utility from activities they believe are popular.

Answer: B

Diff: 3 Page Ref: 325–326

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 34) Under J.C. Penney's everyday low pricing policy, the everyday low prices

- A) ended up being the highest prices ever charged by the company.
- B) were always lower than the sale prices under the previous policy.
- C) were not actually charged every day, but only once a month during half-off sales.
- D) ended up being higher than the sale prices under the previous pricing policy.

Answer: D

Diff: 1 Page Ref: 326–327

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 35) Wilbur Rickhiser, a financial advisor, recently told one of his clients: "The biggest mistake you can make is to hold onto a stock for too long in order to avoid a loss. Let's say you bought a stock for \$50 per share but that six months later the price fell to \$40 after a poor earnings report. Many of my clients in this situation will hold the stock, hoping the price will later rise above \$50. In most cases like this the price does not rise and may even fall. You must know when to cut your losses." Which of the following is the best explanation for Rickhiser's advice?

- A) People sometimes buy stocks because other people are buying them or they want to appear to be fashionable.
- B) People sometimes make mistakes when they buy stocks because of the endowment effect.
- C) People sometimes make mistakes when they buy stocks or when they buy goods and services: they ignore the monetary opportunity costs of their choices.
- D) People often fail to ignore the sunk costs of their decisions. The cost of the stock bought at \$50 per share is a sunk cost.

Answer: D

Diff: 3 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 36) Suppose Adam Einberg pays \$100 for a ticket to a new Broadway play and \$100 was the maximum price he was willing to pay. On the day of the performance of the play Adam refuses to sell the ticket for \$150. How would behavioral economists explain Adam's refusal to sell his ticket?
- A) Adam's tastes had changed from the time he bought the ticket to the time of the performance of the play.
  - B) When Adam bought the ticket he was being unrealistic about his future behavior.
  - C) The endowment effect explains Adam's actions. People like Adam seem to value things that they have more than the things they do not have.
  - D) Adam's income probably increased between the time he bought the ticket and the day of the play's performance.

Answer: C

Diff: 2 Page Ref: 323

Topic: Consumer Behavior

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 37) Assume that you had a ticket for a basketball playoff game that you bought for \$50, the maximum price you were willing to pay. If a friend of yours offers to buy the ticket for \$100 but you decide not to sell it, how can your decision be explained?
- A) You expect to receive greater utility from attending the playoff game than you received from buying the ticket.
  - B) by the endowment effect
  - C) by the law of diminishing marginal utility
  - D) The income effect from the increase in the price of the ticket from \$50 to \$100 was greater than the substitution effect.

Answer: B

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 38) A common mistake made by consumers is the failure to take into account the sunk costs of their actions.

Answer: TRUE

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 39) The endowment effect is the tendency of people to be unwilling to sell a good they already own even if they are offered a price greater than they would be willing to pay to buy the good if they did not already own it.

Answer: TRUE

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 40) Behavioral economics is the study of situations in which people make rational choices.

Answer: FALSE

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 41) A common mistake made by consumers is the failure to take into account the monetary costs of their actions.

Answer: FALSE

Diff: 1 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 42) One reason college students do not study enough to get high grades is that they are unrealistic about their future behavior.

Answer: TRUE

Diff: 1 Page Ref: 325–326

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 43) A sunk cost is a cost that has already been paid and cannot be recovered.

Answer: TRUE

Diff: 1 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 44) One possible reason as to why consumers respond to sales is that by displaying a "high" regular price and a "low" sale price, sales provide consumers with a reference point to interpret the prices being offered.

Answer: TRUE

Diff: 1 Page Ref: 327–328

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 45) Explain the endowment effect.

Answer: The endowment effect refers to the tendency of people to be unwilling to sell a good they already own even if they are offered a price that is greater than the price they would be willing to pay to buy the good if they did not already own it.

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 46) Why do many film processing companies have a policy of printing every picture on a roll of film or a memory card, even if the picture is very fuzzy and customers are allowed to ask for refunds on any pictures they do not like?

Answer: The processing companies are taking advantage of the tendency of consumers to ignore nonmonetary costs. They are relying on the fact that passing up a refund once the picture has already been paid for is a nonmonetary opportunity cost rather than a direct monetary cost, and as a rule, customers rarely do ask for refunds.

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 47) Molly received an autographed poster of David Hasselhoff for her 21st birthday. Her friend Helga offered her \$50 for the poster, but Molly refused to sell the poster even though she knows she would never pay that much to replace it if it was ever damaged or destroyed. Explain this inconsistency in Molly's behavior.

Answer: The inconsistency comes from Molly's failure to take into account nonmonetary opportunity costs. By keeping the poster instead of selling it, Molly incurs an opportunity cost of \$50, so there is a \$50 cost involved in keeping the poster even though she did not pay \$50 for the poster. Behavioral economists believe this inconsistency is caused by the endowment effect, which is the tendency of people to be unwilling to sell something they already own even if they are offered a price greater than they would be willing to pay for the item if they did not already own it.

Diff: 2 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro–11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 48) A construction project in Congressman Foghorn's district is unfinished. Foghorn has asked that a new appropriations bill include funds to complete the project, despite a report by an independent agency that the project is a waste of taxpayer money. Foghorn's project is a bridge that crosses a river between two cities in his district. The press has criticized Foghorn and dubbed the project "a bridge too far" since another bridge, located closer to the same two cities Foghorn's bridge will connect, already exists and can accommodate all traffic between the two cities. Foghorn argues that if the bridge project is not completed, the \$50 million already spent will have been wasted. Is Foghorn's argument economically rational? Explain your answer.

Answer: Foghorn's argument is not rational. The \$50 million that has been spent on bridge construction is a sunk cost that should be ignored when deciding whether to spend additional tax revenue on the bridge. Foghorn should argue that the additional, or marginal, cost of finishing the project is less than the additional benefits that would be provided by the second bridge. If the estimated additional benefits are less than the additional cost the bridge should not be finished.

Diff: 3 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 49) Behavioral economists examine choices that consumers make that are not economically rational. Economists generally assume that people are rational; that is, they weigh the benefits and costs of an action and choose an action only if the benefits outweigh the costs. Why do consumers not act rationally when the result is that they make themselves worse off?

Answer: Most people who do not act rationally do not realize that their actions are inconsistent with their goals. Another way to explain this is that they do not weigh the benefits and costs of their decisions correctly. Three mistakes are commonly made. First, while people usually account for the monetary costs of their choices they often ignore the nonmonetary opportunity costs. Monetary costs are easier to recognize because they call for payments of money, but nonmonetary opportunity costs do not. Second, people fail to ignore sunk costs. Although people may regret spending money for an activity, if the money cannot be recovered it should not factor into making current or future decisions. Finally, people often overvalue the benefit or utility they receive from current choices (for example, smoking) and undervalue the utility they expect to receive in the future (for example, not contracting lung cancer).

Diff: 3 Page Ref: 323

Topic: Behavioral Economics

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 50) Some online penny auctions charge a fee, such as \$1, for every bid placed. Why should these costs of \$1 per bid be considered sunk costs? Would it be smart for someone who has "already invested \$5 in bidding costs" to keep bidding to "protect his or her sunk investments"? Why or why not?

Answer: The \$1 charge per bid should be considered a sunk cost because this is a cost that has already been paid and cannot be recovered. Even if a person has the winning bid for an auction, each bid he or she placed will cost an extra \$1 on top of the winning bid, so whether a person wins or loses, all bids must be paid for. Since sunk costs cannot be recovered, someone who has "invested" \$5 in bidding costs would not be smart to keep bidding to protect this investment.

Diff: 2 Page Ref: 324

Topic: Sunk Cost

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

## 10.5 Appendix: Using Indifference Curves and Budget Lines to Understand Consumer Behavior

1) What is an indifference curve?

- A) It is a curve that shows the total utility and the marginal utility derived from consuming a bundle of goods.
- B) It is a curve that shows the combinations of consumption bundles that gives the consumer the same utility.
- C) It is a curve that shows ranks a consumer's preference for various consumption bundles.
- D) It is a curve that shows the tradeoff a consumer faces among different combinations of consumption bundles.

Answer: B

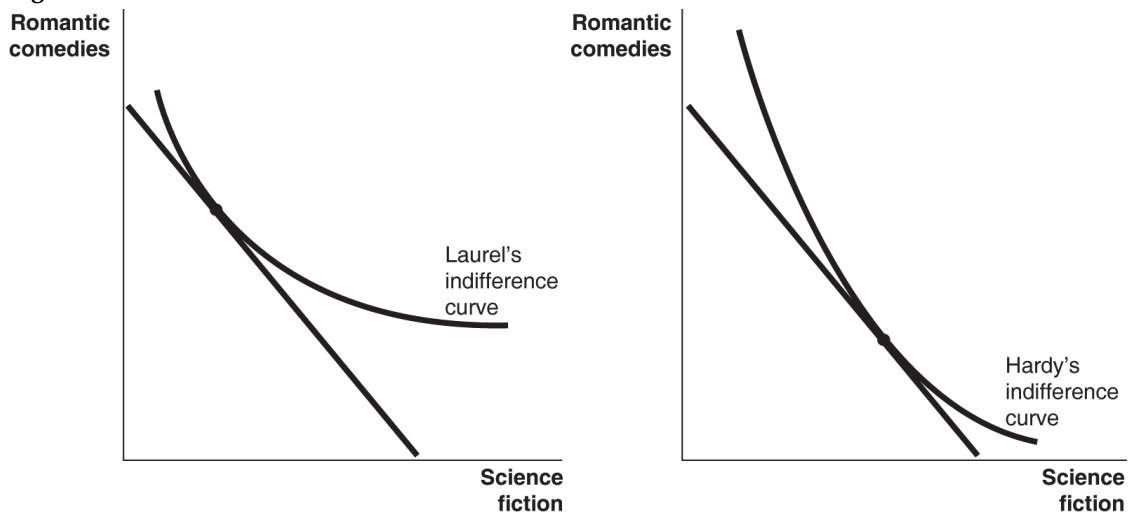
Diff: 1 Page Ref: 335

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Figure 10-3



2) Refer to Figure 10-3. The Bobsey twins, Laurel and Hardy, both enjoy watching romantic comedies and science fiction movies. Based on the diagrams above what can you conclude about their movie preferences?

- A) They have identical movie preferences.
- B) Laurel enjoys romantic comedies more than Hardy.
- C) Laurel enjoys science fiction movies more than Hardy.
- D) The diagrams do not provide any information about relative preferences.

Answer: B

Diff: 2 Page Ref: 339

Topic: Indifference Curves

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 3) Refer to Figure 10-3. Best friends Laurel and Hardy both enjoy watching romantic comedies and science fiction movies. Based on the diagrams above what can you conclude about their movie preferences?

- A) They have identical movie preferences.
- B) Hardy enjoys romantic comedies more than Laurel.
- C) Hardy enjoys science fiction movies more than Laurel.
- D) The diagrams do not provide any information about relative preferences.

Answer: C

Diff: 2 Page Ref: 339

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 4) If Dawson prefers pizza to hamburgers and hamburgers to hot dogs, then if preferences are transitive

- A) at times she could be indifferent among the three items.
- B) she must prefer pizza to hot dogs.
- C) she could prefer hamburgers to pizza on some occasions but not hot dogs to pizza.
- D) she could prefer hot dogs to pizza on some occasions but not hamburgers to hot dogs.

Answer: B

Diff: 2 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 5) If preferences are transitive, indifference curves

- A) intersect at the equilibrium consumption bundle.
- B) intersect at the optimum consumption bundle.
- C) intersect where the marginal rate of substitution for each indifference curve is equal.
- D) do not intersect.

Answer: D

Diff: 2 Page Ref: 337

Topic: Indifference Curves

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

- 6) The slope of an indifference curve

- A) is calculated by dividing the price of good on the vertical axis by price of the good on the horizontal axis.
- B) measures total utility.
- C) measures the marginal rate of substitution between the two goods in question.
- D) is calculated by dividing the quantity of the good on the vertical axis by the quantity of the good on the horizontal axis.

Answer: C



Diff: 2 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

7) What is the marginal rate of substitution?

- A) the price ratio
- B) the rate at which the consumer must give up one good to purchase an additional unit of the other goods in the market
- C) the rate at which the consumer is willing to trade one good for another so that she increases her utility
- D) the rate at which the consumer is willing to trade one good for another without any loss in utility

Answer: D

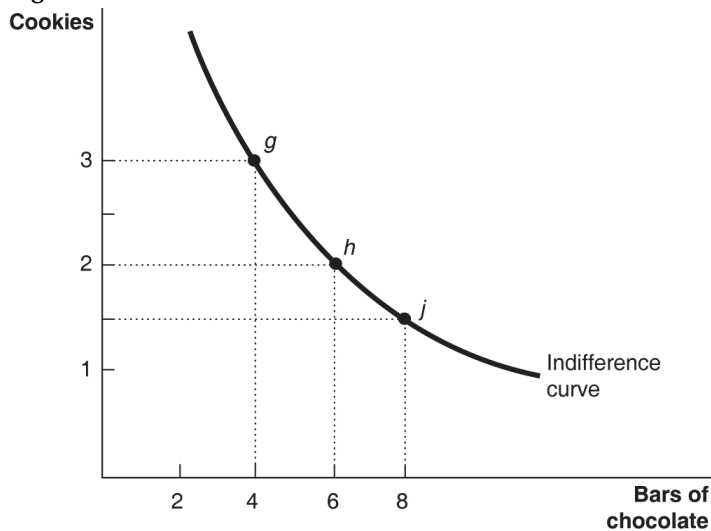
Diff: 2 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-11: Explain how to measure consumer preferences and discuss the major theories about consumer choice.

AACSB: Analytic thinking

Figure 10-4



8) Refer to Figure 10-4. What is the marginal rate of substitution between g and h?

- A)  $\frac{1}{3}$  cookie.
- B)  $\frac{1}{2}$  cookie.
- C) 2 cookies.
- D) 3 cookies.

Answer: B

Diff: 1 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

9) Refer to Figure 10-4. What is the marginal rate of substitution between  $h$  and  $j$ ?

- A)  $\frac{1}{8}$  cookie.      B)  $\frac{1}{4}$  cookie.      C) 2 cookies.      D) 4 cookies.

Answer: B

Diff: 1      Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

10) The absolute value of the slope of the budget constraint is equal to

- A) the marginal rate of substitution between the two goods in question.  
 B) the price of good on the vertical axis divided by the price of the good on the horizontal axis.  
 C) the price of good on the horizontal axis divided by the price of the good on the vertical axis.  
 D) quantity of the good on the vertical axis divided by the quantity of the good on the horizontal axis.

Answer: C

Diff: 2      Page Ref: 338

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

11) A consumer's utility-maximizing combination of goods is given by the bundle that corresponds to the point on

- A) the indifference curve that intersects the horizontal axis.  
 B) the indifference curve that intersects the vertical axis.  
 C) an indifference curve that is tangent to the budget constraint.  
 D) the budget constraint where it intersects one of the axes.

Answer: C

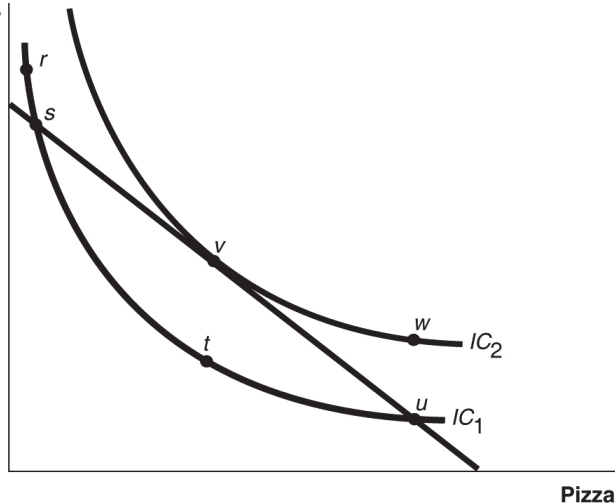
Diff: 2      Page Ref: 338–339

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Figure 10-5  
Hamburger



- 12) **Refer to Figure 10–5.** The consumer can afford consumption bundles  
 A)  $r, s, t$  and  $u$ .                      B)  $r, s, v$  and  $u$ .                      C)  $s, v$  and  $u$  only.                      D)  $s, v, t$  and  $u$ .

Answer: D

Diff: 2      Page Ref: 338–339

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 13) **Refer to Figure 10–5.** Which of the following statements is *true*?  
 A) The consumer gets more utility from bundle  $r$  than from bundle  $v$ .  
 B) The consumer gets less utility from bundle  $w$  than from bundle  $v$ .  
 C) Bundles  $r, s, t$  and  $u$  all cost the same.  
 D) Bundles  $r$  and  $w$  are not affordable.

Answer: D

Diff: 2      Page Ref: 338–339

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 14) **Refer to Figure 10–5.** Suppose the price of pizza increases while the price of hamburger remains constant. Then, the consumer's  
 A) indifference curve becomes more concave away from the origin.  
 B) indifference curve becomes straighter.  
 C) budget constraint moves inward toward the origin on the pizza axis while the hamburger intercept remains the same.  
 D) budget constraint moves outward away from the origin on the pizza axis while the hamburger intercept remains the same.

Answer: C

Diff: 2      Page Ref: 338–339

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 15) Aisha and Debbie both purchase milk and bread at the same Quik Mart. They have different tastes for milk and bread and different incomes. They both buy some milk and some bread, but they buy considerably different quantities of the two goods. Which of the following statements is true, given that Aisha and Debbie are utility–maximizers?  
 A) In equilibrium, their marginal rate of substitution between milk and bread is the same.  
 B) In equilibrium, their marginal rate of substitution between milk and bread is higher for the person with the higher income.  
 C) In equilibrium, the marginal rate of substitution between milk and bread is greater for the person who prefers milk more than bread.  
 D) No statement can be made about their respective marginal rates of substitution without their budget constraint/indifference curve diagrams.

Answer: A

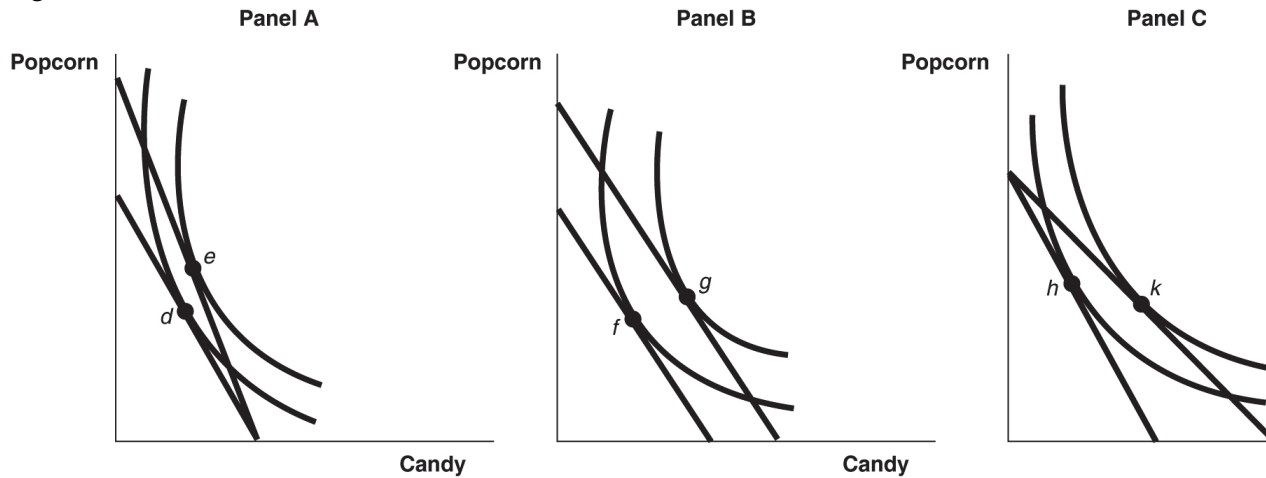
Diff: 3      Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Figure 10-6



- 16) Refer to Figure 10-6. A change in income is shown in
- A) Panel A.
  - B) Panel B.
  - C) Panel C.
  - D) none of the above panels.

Answer: B

Diff: 1 Page Ref: 343-344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 17) Refer to Figure 10-6. A change in the price of candy only is shown in
- A) Panel A.
  - B) Panel B.
  - C) Panel C.
  - D) none of the above panels.

Answer: C

Diff: 1 Page Ref: 343-344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 18) Refer to Figure 10-6. A change in the price of popcorn only is shown in
- A) Panel A.
  - B) Panel B.
  - C) Panel C.
  - D) none of the above panels.

Answer: A

Diff: 1 Page Ref: 343-344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

19) **Refer to Figure 10-6.** Which diagram demonstrates an increase in total utility following a decrease in the price of popcorn?

- A) the movement from *d* to *e* in Panel A                      B) the movement from *f* to *g* in Panel B  
C) the movement from *h* to *k* in Panel C                      D) none of the above

Answer: A

Diff: 2      Page Ref: 343–344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

20) **Refer to Figure 10-6.** Which diagram demonstrates a decrease in total utility following an increase in the price of candy?

- A) the movement from *e* to *d* in Panel A                      B) the movement from *g* to *f* in Panel B  
C) the movement from *k* to *h* in Panel C                      D) none of the above

Answer: C

Diff: 2      Page Ref: 343–344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

21) Suppose the consumer's income increases while the prices of the goods remain constant. Then the

- A) budget constraint shifts inward parallel to the original budget constraint.  
B) budget constraint shifts outward parallel to the original budget constraint.  
C) indifference curves shift outward away from the origin.  
D) indifference curves become flatter.

Answer: B

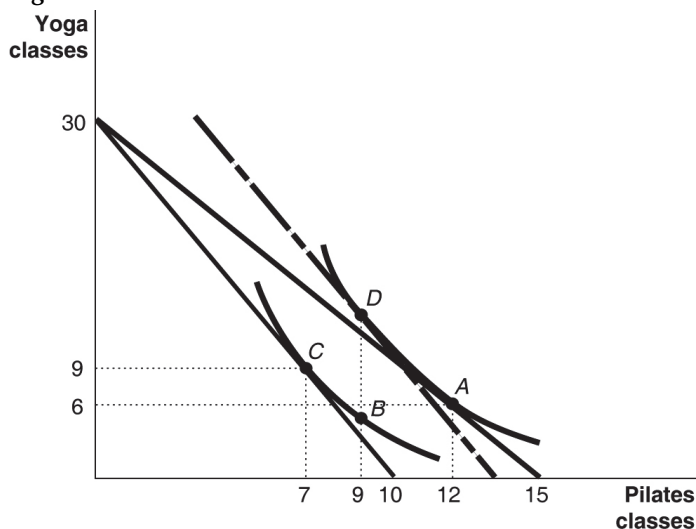
Diff: 1      Page Ref: 343–344

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Figure 10-7**



Manuri has \$300 to spend on Pilates classes and Yoga classes. The price of a group Pilates class is \$20 and the

price of a group Yoga class is \$10. Manuri's optimal bundle is given by "A" in Figure 10–7.

- 22) **Refer to Figure 10–7.** Suppose the price of Pilates sessions rises to \$30 while income and the price of Yoga sessions remain unchanged. What is her new optimal bundle?

A) still remains at bundle A.                      B) bundle B.  
C) bundle C.    D) bundle D.

Answer: C

Diff: 2      Page Ref: 341–342

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 23) **Refer to Figure 10–7.** Suppose the price of Pilates sessions rise to \$30 while income and the price of Yoga sessions remain unchanged. The substitution effect of this price change is represented by the movement from

A) A to B.                      B) A to C.                      C) A to D.                      D) D to B.

Answer: C

Diff: 2      Page Ref: 341–342

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 24) **Refer to Figure 10–7.** Suppose the price of Pilates sessions rise to \$30 while income and the price of Yoga sessions remain unchanged. The income effect of this price change is represented by the movement from

A) A to B.                      B) B to C.                      C) D to B                      D) D to C.

Answer: D

Diff: 2      Page Ref: 341–342

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 25) Which of the following statements about utility and preferences is *false*?

A) If Sidra prefers tea to coffee and coffee to hot chocolate, then she must prefer tea to hot chocolate.  
B) Preferences can be ranked.  
C) If two individuals, Ingrid and Inez, each consume the same bundle of goods, then both Inez and Ingrid must receive the same utility from the bundle.  
D) Utility cannot be compared across consumers.

Answer: C

Diff: 2      Page Ref: 335

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

26) A curve that shows combinations of consumption bundles that give a consumer the same utility is called

- A) a utility curve.
- B) an indifference curve.
- C) a preference curve.
- D) a demand curve.

Answer: B

Diff: 1 Page Ref: 335

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

27) The slope of the indifference curve is referred to as

- A) the marginal rate of substitution.
- B) the price ratio.
- C) the marginal rate of consumption.
- D) the marginal tradeoff rate.

Answer: A

Diff: 1 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

28) What does the marginal rate of substitution measure?

- A) It measures the rate at which a consumer must give up one good to purchase another good.
- B) It measures the rate at which a consumer will substitute one good for another when the price of one good changes.
- C) It measures the change in utility from consuming one additional unit of a good.
- D) It measures the rate at which a consumer is willing to trade off one product for another while keeping utility constant.

Answer: D

Diff: 2 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

29) Which of the following is held constant along an indifference curve?

- A) the prices of the goods in question
- B) the marginal rate of substitution between the two goods in question
- C) the marginal utility derived from consuming any bundle of goods on the indifference curve
- D) the total utility derived from consuming any bundle of goods on the indifference curve

Answer: D

Diff: 2 Page Ref: 335-336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

30) In the utility maximizing model, consumer preferences are assumed to be transitive. What does this mean?

- A) that consumers prefer more of a good to less
- B) that consumers have the freedom to change their preferences from time to time
- C) that consumers have preferences that are relatively consistent in the time period under consideration

D) that consumers go through cycles in their consumption behavior

Answer: C

Diff: 2 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

31) Why do convex indifference curve have a negative slope?

- A) because consumers take market prices as given
- B) because consumers face a budget constraint
- C) because to keep utility constant, a consumer must get more of one good if she is to give up some of the other
- D) because scarcity implies that it is not possible to consume more of one good without giving up some of the other

Answer: C

Diff: 2 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

32) What happens to the absolute value of marginal rate of substitution as you move down a convex (bowed toward the origin) indifference curve?

- A) increases
- B) decreases
- C) remains constant
- D) could increase or decrease

Answer: B

Diff: 2 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

33) A consumer's budget constraint is

- A) the limited income that a consumer has to spend on goods and services.
- B) the rate at which the consumer must give up one good to purchase an additional unit of the other goods in the market.
- C) the price ratio a consumer faces in the marketplace.
- D) the extent to which one's preferences are limited by one's income.

Answer: A

Diff: 2 Page Ref: 337

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

34) Vinny consumes tacos and chicken wings. To keep his utility constant, he must consume more tacos if he consumes fewer chicken wings. This means that

- A) Vinny's indifference curve for tacos and chicken wings must have a negative slope.
- B) the prices Vinny pays for tacos and chicken wings are always the same.
- C) Vinny's marginal utility from each good must be constant along his convex indifference curves for tacos and chicken wings.
- D) Vinny's marginal rate of substitution must be constant along his indifference curves for tacos and chicken wings.

Answer: A



Diff: 3 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

35) Which of the following statements is *false*?

- A) There is an indifference curve associated with any combination of goods selected by a consumer.
- B) A consumer is indifferent among all consumption bundles along a given budget line.
- C) All consumption bundles along a given indifference curve are equally desirable.
- D) Consumption bundles that lie on higher indifference curves yield higher utility.

Answer: B

Diff: 2 Page Ref: 338–339

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

36) Which of the following is *not* a characteristic of indifference curves?

- A) Indifference curves cannot intersect.
- B) Indifference curves are usually bowed in, or convex.
- C) The slope of an indifference curve is negative.
- D) The closer to the origin, the greater the utility level.

Answer: D

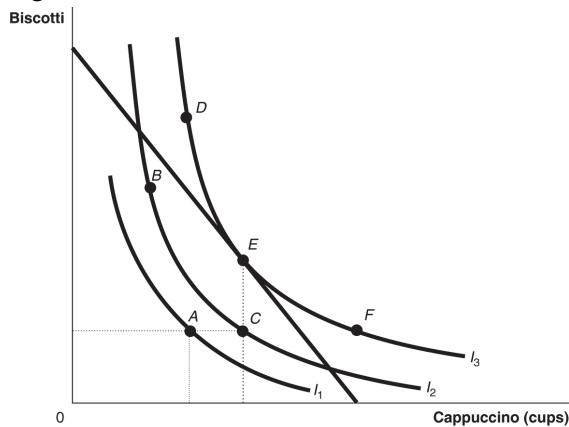
Diff: 2 Page Ref: 338–339

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

**Figure 10–8**



37) Refer to Figure 10–8. Given the budget constraint in the diagram, which of the following statements is *false*?

- A) The consumer receives the same level of utility from consumption bundles *d*, *e* and *f*.
- B) Consumption bundles *b* and *c* yield the same level of utility, which is higher than the utility represented by bundle *a*.
- C) Although the consumer receives the same level of utility from bundles *d* and *e*, she cannot afford to purchase bundle *d*.
- D) The consumer's optimal bundle could be bundle *d*, *e* or *f*.

Answer: D

Diff: 2 Page Ref: 338–339

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 38) Refer to Figure 10–8. If the price of biscotti is \$1.50 and the price of a cappuccino is \$3.00, what is the slope of the budget constraint?

- A) -2
- B)  $-(3.00 - 1.50)/(3.00 + 1.50) = -1/3$
- C) -1/2
- D) The slope cannot be determined without the value of income.

Answer: A

Diff: 2 Page Ref: 338–339

Topic: Budget Constraint

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 39) Assume that Anne has \$300 to spend on DVDs and CDs. Her optimal consumption of DVDs and CDs is illustrated by a tangency between a budget line and an indifference curve. Now assume that the price of CDs rises but the price of DVDs falls. How can you show that Anne is made better off by these price changes?

- A) Show that the price changes shift Anne's budget line outward; the budget line is tangent to a higher indifference curve.
- B) Show that the price changes move Anne along her budget line to a higher indifference curve.
- C) Show that Anne can afford to buy the optimal combination of DVDs and CDs at their original prices; then show that Anne can now reach a higher indifference curve.
- D) Show that Anne can now afford to buy more DVDs, which give her greater utility than CDs.

Answer: C

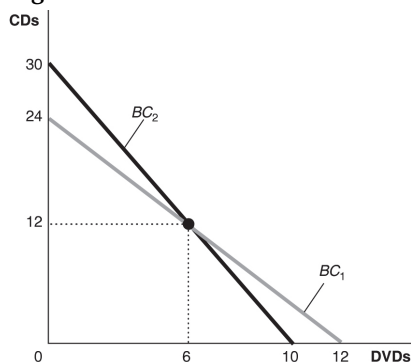
Diff: 2 Page Ref: 341–342

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

Figure 10–9



- 40) Refer to Figure 10–9. The change in the budget constraint from  $BC_1$  to  $BC_2$  implies

- A) the prices of DVDs and CDs have increased.

- B) income and the prices of DVDs and CDs have increased.
- C) the price of DVDs has increased and the price of CDs has decreased.
- D) the price of DVDs has decreased and the price of CDs has increased.

Answer: C

Diff: 2 Page Ref: 341–342

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 41) **Refer to Figure 10–9.** Consider the budget constraint  $BC_1$ . If the price of DVDs is \$20 and the price of CDs is \$10, what is the consumer's income?

- A) \$120
- B) \$240
- C) \$360
- D) \$480

Answer: B

Diff: 2 Page Ref: 341–342

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 42) **Refer to Figure 10–9.** If the consumer has \$240 to spend on DVDs and CDs, what is the price of a DVD if the budget constraint is  $BC_1$ ?

- A) \$10
- B) \$20
- C) \$24
- D) \$40

Answer: B

Diff: 2 Page Ref: 341–342

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 43) **Refer to Figure 10–9.** If the consumer has \$240 to spend on DVDs and CDs, what is the price of a CD if the budget constraint is  $BC_2$ ?

- A) \$8
- B) \$10
- C) \$20
- D) \$40

Answer: A

Diff: 2 Page Ref: 341–342

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 44) The marginal rate of substitution is determined by the slope of an indifference curve.

Answer: TRUE

Diff: 1 Page Ref: 336

Topic: Marginal Rate of Substitution

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 45) A consumer's indifference curves can never cross.

Answer: TRUE

Diff: 1 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 46) A consumer's utility-maximizing combination of goods is given by the bundle that corresponds to the highest point on his indifference curve.

Answer: FALSE

Diff: 1 Page Ref: 336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 47) Total utility is constant along a given indifference curve.

Answer: TRUE

Diff: 1 Page Ref: 335–336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 48) An increase in income results in an outward shift of an indifference curve.

Answer: FALSE

Diff: 1 Page Ref: 344

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 49) All consumption bundles along a given indifference curve are equally desirable.

Answer: TRUE

Diff: 1 Page Ref: 335–336

Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 50) What is an indifference curve? Why can indifference curves never cross?

Answer: An indifference curve shows the combination of consumption bundles that give the consumer the same utility. Indifference curves never cross because we assume consumers have transitive preferences. If a consumer prefers consumption bundle *A* to consumption bundle *B*, and he prefers consumption bundle *B* to consumption bundle *C*, then he must prefer bundle *A* to bundle *C*. If indifference curves cross, this assumption is violated.

Diff: 2 Page Ref: 335–336

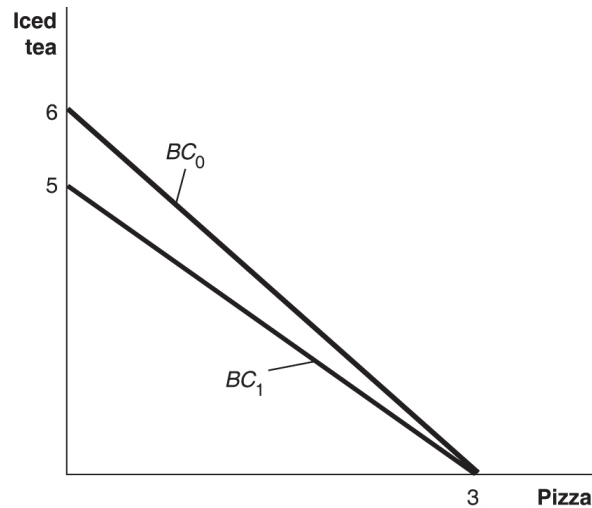
Topic: Indifference Curves

Learning Outcome: Micro-10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 51) Gowri has \$6 per day to purchase lunch. She spends all of her lunch money on pizza and iced tea. The price of pizza is \$2.00 per slice and iced tea costs \$1 per bottle.
- Draw Gowri's budget constraint and label it  $BC_0$ . Put pizza on the horizontal axis and iced tea on the vertical axis. Be sure to identify the intercept values.
  - If the price of iced tea rises to \$1.20 per bottle, show what will happen to her budget constraint in your diagram. Be sure to indicate any new intercept values.

Answer: a.



b.  $BC_1$  in the figure above represents the effect of an increase in the price of iced tea.

Diff: 2 Page Ref: 340–341

Topic: Budget Constraint

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 52) Farah has \$100 to spend each month on bread and chicken. Suppose the price of bread is \$4 a loaf and the price of chicken is \$5 per pound.
- Draw her budget constraint and label it  $BC_0$ . Put bread on the horizontal axis and chicken on the vertical axis. Be sure to identify the intercept values.
  - Suppose Farah is a utility maximizer and she consumes 10 loaves of bread and 12 pounds of chicken. On the same graph you drew in part (a), draw an indifference curve to identify her optimal bundle. Label this bundle "E."
  - Is her budget exhausted? Verify your answer.
  - Now suppose Farah's income falls to so that she can now devote \$80 to the two goods. Prices however remain unchanged. In the same diagram, graph her new budget constraint and label it  $BC_1$ . Be sure to identify any new intercept values.
  - Following the change in income, can Farah consume the same bundle "E"? Explain your answer.
  - What must happen to her total utility following the decrease in her income?

Answer: a. See the figure below

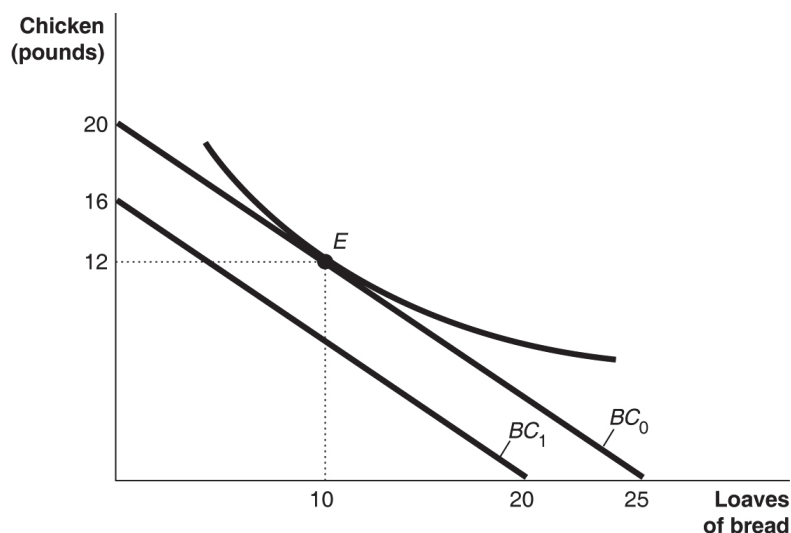
b. See the figure below.

c. Yes, her budget is exhausted. She spends  $(\$4 \times 10) + (\$5 \times 12) = \$100$ .

d. See figure below.

e. No, the bundle "E" is no longer affordable. it lies outside her budget line.

f. Her total utility falls.



Diff: 3 Page Ref: 340–344

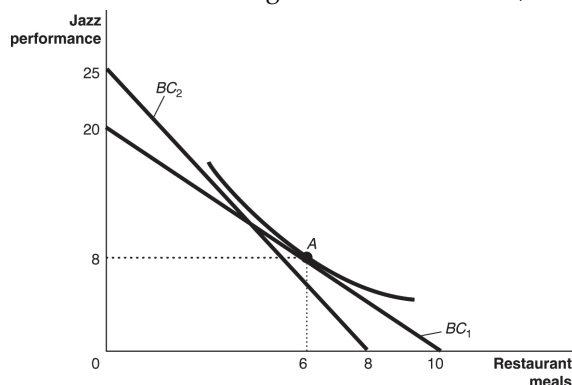
Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking

- 53) Grant has \$200 to spend each month on restaurant meals and jazz performances at his neighborhood jazz club. The price of a typical restaurant meal is \$20 and the price of a jazz performance ticket is \$10. Grant is maximizing his utility by consuming 6 restaurant meals and attending 8 jazz performances. Suppose Grant still has \$200 to spend, but the price of restaurant meal rises to \$25, while the price of jazz performance ticket drops to \$8. Is Grant better off or worse off than he was before the price change? Use a budget constraint/indifference curve graph to illustrate your answer.

Answer: Initially, when the price of a typical restaurant meal is \$20 and the price of a jazz performance ticket is \$10, Grant consumes the bundle "A" on  $BC_1$ . Following the price changes, Grant's new budget line is  $BC_2$ . He is no longer able to afford this same bundle "A" as shown in the figure below. Therefore, he is worse off.



Diff: 3 Page Ref: 341–342

Topic: Indifference Curves

Learning Outcome: Micro–10: Explain how the factors of utility and budgets influence consumer decisions.

AACSB: Analytic thinking