Test Bank

**MULTIPLE CHOICE**

1. A researcher uses an anonymous survey to investigate the television-viewing habits of American adolescents. The entire group of American adolescents is an example of a \_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sample | c. | population |
| b. | statistic | d. | parameter |

ANS: C REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

2. A researcher uses an anonymous survey to investigate the television-viewing habits of American adolescents. Based on the set of 356 surveys that were completed and returned, the researcher finds that these students spend an average of 3.1 hours each day watching television. For this study, the set of 356 students who returned surveys is an example of a \_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | parameter | c. | population |
| b. | statistic | d. | sample |

ANS: D REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

3. A researcher uses an anonymous survey to investigate the television-viewing habits of American adolescents. The goal of the research is to determine the average number of hours each day that American adolescents spend watching television. The researcher is trying to determine a number that is an example of a \_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | parameter | c. | population |
| b. | statistic | d. | sample |

ANS: A REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

4. A researcher is interested in the eating behavior of rats and selects a group of 25 rats to be tested in a research study. The group of 25 rats is an example of a \_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sample | c. | population |
| b. | statistic | d. | parameter |

ANS: A REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

5. A researcher is curious about the average monthly cell phone bill for high school students in the state of Florida. If this average could be obtained, it would be an example of a \_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sample | c. | population |
| b. | statistic | d. | parameter |

ANS: D REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

6. Although a research study is typically conducted with a relatively small group of participants known as a \_\_\_\_\_\_\_\_\_, most researchers hope to generalize their results to a much larger group known as a \_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | sample; population | c. | population; sample |
| b. | statistic; sample | d. | parameter; population |

ANS: A REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Understand

7. The relationship between a statistic and a parameter is the same as the relationship between \_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | a sample and a population |
| b. | a statistic and a parameter |
| c. | a parameter and a population |
| d. | descriptive statistics and inferential statistics |

ANS: A REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Understand

8. Organizing a set of scores in a table is an example of using \_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | parameters | c. | descriptive statistics |
| b. | statistics | d. | inferential statistics |

ANS: C REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Remember

9. A characteristic, usually a numerical value, which describes a sample is called a \_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | parameter | c. | variable |
| b. | statistic | d. | constant |

ANS: B REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Remember

10. A researcher records the change in weight (gained or lost) during the first semester of college for each individual in a group of 25 freshmen, then calculates the average change in weight. The average is an example of a \_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | parameter | c. | variable |
| b. | statistic | d. | constant |

ANS: B REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

11. The average verbal SAT score for the entire class of entering freshmen is 530. However, if you select a sample of 20 freshmen and compute their average verbal SAT score you probably will not get exactly 530. What statistical concept is used to explain the natural difference that exists between a sample mean and the corresponding population mean?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Statistical error | c. | Sampling error |
| b. | Inferential error | d. | Parametric error |

ANS: C REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

12. A researcher conducts an experiment to determine whether moderate doses of St. John's Wort have any effect of memory for college students. For this study, what is the independent variable?

|  |  |
| --- | --- |
| a. | The amount of St. John’s Wort given to each participant |
| b. | The memory score for each participant |
| c. | The group of college students |
| d. | Cannot answer without more information |

ANS: A REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

13. A recent study reports that students who just finished playing a prosocial video game were more likely to help others than students who had played a neutral or antisocial game. For this study, what is the independent variable?

|  |  |
| --- | --- |
| a. | The students who were given the prosocial game |
| b. | The students who were given the neutral or antisocial game |
| c. | The kind of game given to the students |
| d. | The helping behavior of the students |

ANS: C REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

14. In a correlational study,

|  |  |
| --- | --- |
| a. | 1 variable is measured and 2 groups are compared. |
| b. | 2 variables are measured and 2 groups are compared. |
| c. | 1 variable is measured and there is only 1 group of participants. |
| d. | 2 variables are measured and there is only 1 group of participants. |

ANS: D REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Understand

16. For a research study comparing attitude scores for males and females, participant gender is an example of what kind of variable?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | An independent variable | c. | A quasi-independent variable |
| b. | A dependent variable | d. | A quasi-dependent variable |

ANS: C REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

17. For an experiment comparing two methods of teaching social skills training to autistic children, the independent variable is \_\_\_\_\_\_\_ and the dependent variable is \_\_\_\_\_\_\_.

|  |  |
| --- | --- |
| a. | teaching methods; the autistic children |
| b. | the autistic children; the social skills that are learned |
| c. | the social skills that are learned; the autistic children |
| d. | teaching methods; the social skills that are learned |

ANS: D REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

18. Which of the following is an example of a discrete variable?

|  |  |
| --- | --- |
| a. | The age of each student in a psychology class |
| b. | The gender of each student in a psychology class |
| c. | The amount of time to solve a problem |
| d. | The amount of weight gained for each freshman at a local college |

ANS: B REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

19. Which of the following is an example of a continuous variable?

|  |  |
| --- | --- |
| a. | The gender of each student in a psychology class |
| b. | The number of males in each class offered by the college |
| c. | The amount of time to solve a problem |
| d. | The number of children in a family |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

20. If it is impossible to divide the existing categories of a variable, then it is an example of a(n) \_\_\_\_\_ variable.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | independent | c. | discrete |
| b. | dependent | d. | continuous |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

21. What kind of variable requires the use of real limits?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Independent | c. | Discrete |
| b. | Dependent | d. | Continuous |

ANS: D REF: 1.2 Variables and Measurement KEY: Bloom’s: Remember

22. A doctor is measuring children’s heights to the nearest ½ inch and obtains scores such as 40.0, 40.5, 41.0, and so on. What are the real limits for a score of *X* = 42?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 41 and 43 | c. | 41.75 and 42.25 |
| b. | 41.5 and 42.5 | d. | 41.25 and 42.75 |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

23. The participants in a research study are classified as high, medium, or low in self-esteem. What measurement scale is being used to classify self-esteem?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Nominal | c. | Interval |
| b. | Ordinal | d. | Ratio |

ANS: B REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

24. Students in an introductory art class are classified as art majors and non-art majors. What scale of measurement is being used to classify the students?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Nominal | c. | Interval |
| b. | Ordinal | d. | Ratio |

ANS: A REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

25. Using letter grades (A, B, C, D, and F) to classify student performance on an exam is an example of measurement on a(n) \_\_\_\_\_\_\_ scale of measurement.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nominal | c. | interval |
| b. | ordinal | d. | ratio |

ANS: B REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

26. Determining the class standing (1st, 2nd, and so on) for the graduating seniors at a high school would involve measurement on a(n) \_\_\_\_\_ scale of measurement.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nominal | c. | interval |
| b. | ordinal | d. | ratio |

ANS: B REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

27. What additional information is obtained by measuring two individuals on an ordinal scale compared to a nominal scale?

|  |  |
| --- | --- |
| a. | Whether the measurements are the same or different |
| b. | The direction of the difference |
| c. | The size of the difference |
| d. | None of the other options is correct |

ANS: B REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

28. What additional information is obtained by measuring two individuals on an interval scale compared to an ordinal scale?

|  |  |
| --- | --- |
| a. | Whether the measurements are the same or different |
| b. | The direction of the difference |
| c. | The size of the difference |
| d. | None of the other options is correct |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

29. What scale of measurement is being used when a teacher measures the number of correct answers on a quiz for each student?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Nominal | c. | Interval |
| b. | Ordinal | d. | Ratio |

ANS: D REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

30. After measuring two individuals, a researcher can say that Tom’s score is 4 points higher than Bill’s. The measurements must come from a(n) \_\_\_\_\_\_\_ scale.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | nominal | c. | interval |
| b. | ordinal | d. | interval or ratio |

ANS: D REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

31. What kind of measurement scale is necessary to conclude that one score is twice as big as another?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Ordinal | c. | Ratio |
| b. | Interval | d. | Interval or ratio |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

32. For statistical purposes, it usually is not important to differentiate between which two scales of measurement?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Nominal and ordinal | c. | Interval and ratio |
| b. | Ordinal and interval | d. | Nominal and interval |

ANS: C REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

33. What is the final step to be performed in the mathematical expression, (Σ*X*)2?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Square each score | c. | Add the squared scores |
| b. | Add the scores | d. | Square the sum of the scores |

ANS: D REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

34. What is the first step to be performed in the following mathematical expression, Σ*X*2?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Square each score | c. | Add the squared scores |
| b. | Add the scores | d. | Square the sum of the scores |

ANS: A REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

35. What is the final step to be performed when computing Σ(*X* – 2)2?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Square each value | c. | Sum the squared values |
| b. | Subtract 2 points from each score | d. | Subtract 22 from each X2 value |

ANS: C REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

36. What is the first step to be performed when computing Σ(*X* + 2)2?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Square each value | c. | Sum the squared values |
| b. | Add 2 points to each score | d. | Sum the (*X* + 2) values |

ANS: B REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

37. What is the value of (Σ*X*)2 for the scores 1, 5, 2?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 | c. | 30 |
| b. | 16 | d. | 64 |

ANS: D REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

38. What is the value of Σ*X*2 for the scores 1, 0, 2, 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 14 | c. | 28 |
| b. | 21 | d. | 49 |

ANS: B REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

39. What is the value of Σ*X* + 1 for the scores 1, 0, 2, 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 8 | c. | 11 |
| b. | 10 | d. | 14 |

ANS: A REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

40. What is the value of Σ(*X* + 1) for the scores 1, 0, 1, 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 4 | c. | 7 |
| b. | 6 | d. | 10 |

ANS: D REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

41. What is the value of Σ(*X* – 1)2 for the scores 1, 2, 1, 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 | c. | 36 |
| b. | 16 | d. | 49 |

ANS: A REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

42. What is the value of (Σ*X*)2 for the scores 1, 0, 2, 4?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 14 | c. | 28 |
| b. | 21 | d. | 49 |

ANS: D REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

43. What is the value of Σ*X* + 1 for the scores 1, 6, 3?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 | c. | 13 |
| b. | 11 | d. | 16 |

ANS: B REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

44. What is the value of Σ(*X* + 1) for the scores 2, 4, 7?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 10 | c. | 13 |
| b. | 11 | d. | 16 |

ANS: D REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

45. What is the value of Σ(*X* – 2) for the scores 2, 3, 5?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 4 | c. | 8 |
| b. | 6 | d. | 10 |

ANS: A REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

46. What is the value of Σ(*X* – 2)2 for the scores 2, 3, 5?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 8 | c. | 16 |
| b. | 10 | d. | 36 |

ANS: B REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

47. You are instructed to subtract 4 points from each score and find the sum of the resulting values. How would this set of instructions be expressed in summation notation?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Σ*X* – 4 | c. | 4 – Σ*X* |
| b. | Σ (*X* – 4) | d. | Σ(4 – *X*) |

ANS: B REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

48. You are instructed to subtract 4 points from each score, square the resulting value, and find the sum of the squared numbers. How would this set of instructions be expressed in summation notation?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Σ*X* – 42 | c. | Σ(*X* – 4)2 |
| b. | (Σ*X* – 4)2 | d. | Σ*X*2 – 4 |

ANS: C REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

49. Which of the following is done last in the order of operations?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Squaring | c. | Addition |
| b. | Multiplication | d. | Summation () |

ANS: C REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

**TRUE/FALSE**

1. Using the average score to describe a sample is an example of inferential statistics.

ANS: F REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Understand

2. Using the election results from a sample of *n* = 100 voters to predict the results for the entire state is an example of inferential statistics.

ANS: T REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Understand

3. A researcher is interested in the average income for registered voters in the United States. The entire group of registered voters is an example of a population.

ANS: T REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

4. A researcher interested in vocabulary development obtains a sample of 3-year-old children to participate in a research study. The average score for the group of children is an example of a parameter.

ANS: F REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Apply

5. The goal for an experiment is to demonstrate that changes in one variable are responsible for causing changes in a second variable.

ANS: T REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Understand

7. A correlational study typically uses only one group of participants but measures two different variables (two scores) for each individual.

ANS: T REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Remember

8. A recent study found a correlation between gum disease and heart disease. This result indicates that gum disease causes people to develop heart disease.

ANS: F REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

9. A correlational study is used to examine the relationship between two variables but cannot determine whether it is a cause-and-effect relationship.

ANS: T REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Understand

10. A recent report concluded that children with siblings have better social skills than children who grow up as an only child. This is an example of an experimental study.

ANS: F REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

11. A recent report concluded that college graduates have higher life-satisfaction scores than individuals who do not receive college degrees. For this study, graduating versus not graduating is an example of a quasi-independent variable.

ANS: T REF: 1.3 Three Data Structures, Research Methods, and Statistics KEY: Bloom’s: Apply

12. A discrete variable must be measured on a nominal or an ordinal scale.

ANS: F REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

13. Classifying people into two groups on the basis of gender is an example of measurement on an ordinal scale.

ANS: F REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

14. To determine how much difference there is between two individuals, you must use either an interval or a ratio scale of measurement.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

15. If a researcher measures two individuals on a nominal scale, it is impossible to determine which individual has the larger score.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

16. If a researcher measures two individuals on an ordinal scale, it is impossible to determine how much difference exists between the two people.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

17. For statistical purposes, there usually is not much reason to differentiate between interval and ratio scales.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

18. Recording the number of text messages you receive each day would be an example of measuring a discrete variable.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

19. A high school gym teacher records how much time each student requires to complete a one-mile run. This is an example of measuring a continuous variable.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

20. In an introductory theater class, the professor records each student’s favorite movie from the previous year. The teacher is measuring a discrete variable.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Apply

21. A data set is described as consisting of *n* = 15 scores. Based on the notation being used, the data set is a sample.

ANS: T REF: 1.2 Variables and Measurement KEY: Bloom’s: Understand

22. To compute Σ*X*2, you first add the scores, then square the total.

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

23. The first step in computing Σ(*X* + 1) is to add 1 point to each score.

ANS: T REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

24. The final step in computing Σ(*X* + 1)2 is to square the sum of the (*X* + 1) values.

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

25. For the following scores, *X*2 = (*X*)2. Scores: 1, 1, 1, 1

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

26. For the following scores, Σ(*X* + 1) = 9. Scores: 1, 3, 0, 1

ANS: T REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

27. For the following scores, Σ(*X* + 1)2 = 81. Scores: 1, 3, 0, 1

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

28. For the following scores, Σ(*X* – 1) = 10. Scores: 1, 3, 7

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

29. For the following scores, Σ*X*2 = 35. Scores: 1, 3, 5

ANS: T REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

30. For the following scores, Σ*X*2 = 49. Scores: 1, 4, 2, 0

ANS: F REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

**SHORT ANSWER**

1. Statistical techniques are classified into two major categories: descriptive and inferential. Describe the general purpose of each category.

ANS: The purpose of descriptive statistics is to summarize and simplify the organization and presentation of data. The purpose of inferential statistics is to use the limited data from a sample as the basis for making general conclusions about the population.

REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Understand

2. Define the concept of “sampling error.” Note: your definition should include the concepts of sample, population, statistic, and parameter.

ANS: A *parameter* is a value that is obtained from a *population* of scores and is used to describe the population. A *statistic* is a value obtained from a *sample* and used to describe the sample. Typically, it is impossible to obtain measurements for an entire population, so researchers must rely on information from samples; that is, researchers use statistics to obtain information about unknown parameters. However, samples provide only limited information about their populations. Thus, sample statistics are usually not identical to their corresponding population parameters. The error or discrepancy between a statistic and the corresponding parameter is called *sampling error*.

REF: 1.1 Statistics, Science, and Observations KEY: Bloom’s: Remember

3. Describe the sequence of mathematical operations that would be used to evaluate each of the following expressions:

a. Σ*X*2

b. (Σ*X*)2

c. Σ*X* – 2

d. Σ(*X* – 2)

e. Σ(*X* – 2)2

ANS:

a. Square each score, then sum the squared values.

b. Sum the scores, then square the sum.

c. Sum the scores, then subtract 2 from the sum.

d. Subtract 2 from each score, then sum the resulting values.

e. First, subtract 2 from each score, then square the resulting values, then sum the squared numbers.

REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

4. Calculate each value requested for the following set of scores. Scores: 2, 3, 0, 5

a. Σ*X*

b. Σ*X*2

c. (Σ*X*)2

ANS:

a. 10

b. 38

c. (10)2 = 100

REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

5. Calculate each value requested for the following set of scores. Scores: 3, 4, 2, 6

a. Σ*X* – 2

b. Σ(*X* – 2)

c. Σ(*X* – 2)2

ANS:

a. 13

b. 7

c. 21

REF: 1.4 Statistical Notation KEY: Bloom’s: Understand

6. Calculate each value requested for the following set of scores.

a. Σ*X* *X* *Y*

b. Σ*Y* 1 5

c. Σ*X*Σ*Y* 3 1

d. Σ*XY* 0 –2

2 –4

ANS:

a. 6

b. 0

c. 0

d. 0

REF: 1.4 Statistical Notation KEY: Bloom’s: Understand