## Choose the best answer to each question.

- 1. Which of the following is the sample space when 2 coins are tossed?
  - A. {H, T, H, T}
  - B. {H, T}
  - C. {HH, HT, TH, TT}
  - D. None of the above
- 2. A pair of dice is rolled. What is the probability of getting a sum of 2?
  - A. 1/6
  - B. 1/3
  - C. 1/36
  - D. 1/18
- 3. In a class of 30 students, there are 17 girls and 13 boys. Five are **A** students and three of these students are girls. If a student is chosen at random, what is the probability of choosing a girl or an **A** student?
  - A. 19/30
  - B. 11/15
  - C. 17/180
  - D. 1
- 4. In the United States, 43% of people wear a seat belt while driving. If two people are chosen at random, what is the probability that both of them wear a seat belt?
  - A. 86%
  - B. 18%
  - C. 57%
  - D. 60%
- 5. Three cards are chosen at random from a deck without replacement. What is the probability of getting a jack, a ten and a nine in order?
  - A. 8/16,575
  - B. 1/2197
  - C. 6/35,152
  - D. 3/52

- 6. A city survey found that 47% of teenagers have a part time job. The same survey found that 78% plan to attend college. If a teenager is chosen at random, what is the probability that the teenager has a part time job and plans to attend college?
  - A. 60%
  - B. 63%
  - C. 37%
  - D. 22%
- 7. In a shipment of 100 televisions, 6 are defective. If a person buys two televisions from that shipment, what is the probability that both are defective?
  - A. 3/100
  - B. 9/2500
  - C. 1/330
  - D. 3/5
- 8. In a school, 14% of students take drama and computer classes, and 67% take drama class. What is the probability that a student takes computer class given that the student takes drama class?
  - A. 81%
  - B. 21%
  - C. 53%
  - D. 33%
- 9. The weights of 9 students, measured in pounds, are recorded below. Find the mean weight. 135, 120, 116, 119, 121, 125, 135, 131, 123
  - A. 130
  - B. 125
  - C. 115
  - D. 112

- 10. What is the range of weights given in problem 9?
  - A. 12
  - B. 118
  - C. 19
  - D. 38
- 11. What is the mode of the weights in problem 9?
  - A. 135
  - B. 123
  - C. 16
  - D. 119
- 12. What is the median of the weights given in problem 9?
  - A. 120
  - B. 123
  - C. 131
  - D. 119
- 13. The mean price of 5 items is \$7.00. The prices of the first four items are \$6.50, \$8.00, \$5.50 and \$6.00. How much does the fifth item cost?
  - A. \$12.00
  - B. \$7.50
  - C. \$9.00
  - D. \$5.00
- 14. The range of a set of numbers is 1,362. The greatest number is 2,172. What is the least number?
  - A. 810
  - B. 750
  - C. 1050
  - D. 435
- 15. The mean of a set of 7 numbers is13. What is the sum of the numbers?
  - A. 91
  - B. 72
  - C. 101
  - D. 182

- 16. Find the mode of the following test scores: 89, 78, 91, 82, 75, 89, 84, 95, 89, 93
  - A. 59
  - B. 89
  - C. 109
  - D. 93
- 17. The mean of a set of data is 174.25 and the sum of the data is 1, 394. How many numbers are in the set?
  - A. 6
  - B. 11
  - C. 8
  - D. 12
- 18. The grade point averages of 10 students are listed below. Find the median grade point average: 3.15, 3.62, 2.54, 2.81, 3.97, 1.85, 1.93, 2.63, 2.50, 2.80
  - A. 2.715
  - B. 2.015
  - C. 3.501
  - D. 2.901
- 19. Larry's math test grades are 87, 93, 89 and 85. What grade must he get on the fifth test in order to get a mean of 90 for the term?
  - A. 77
  - B. b 96
  - C. 92
  - D. 88
- 20. A student is chosen at random from a class of 16 girls and 14 boys. What is the probability that the student chosen is not a girl?
  - A. 8/15
  - B. 7/15
  - C. 1
  - D. 1/5

## Subskill # 29

## Probability and Statistics I

## **Answer Key**

- 1. C
- 2. C
- 3. A
- 4. B
- 5. A
- 6. C
- 7. C
- 8. B
- 9. B
- 10. C
- 11. A
- 12. B
- 13. C
- 14. A
- 15. A
- 16. B
- 17. C
- 18. A
- 19. B
- 20. B