Choose the best answer to each question.

1. A glass jar contains 5 red, 3 blue and 2 green jellybeans. If a jellybean is chosen at random from the jar, what is the probability that it is not blue?
   - A. 1/2
   - B. 3/10
   - C. 7/10
   - D. 1/5

2. A number from 1 to 5 is chosen at random. What is the probability that the number chosen is not odd?
   - A. 2/5
   - B. 3/5
   - C. 0
   - D. 4/5

3. If a number is chosen at random from the following list, what is the probability that it is not prime? 2, 3, 5, 7, 11, 13, 17, 19
   - A. 1
   - B. 1/8
   - C. 0
   - D. 2

4. What is the probability of choosing a vowel from the alphabet?
   - A. 21/26
   - B. 5/26
   - C. 1/26
   - D. 5/13

5. Spin a spinner numbered 1 to 7, and toss a coin. What is the probability of getting an odd number on the spinner and a tail on the coin?
   - A. 3/14
   - B. 2/7
   - C. 5/14
   - D. None of the above

6. Four cards are chosen from a standard deck of 52 playing cards with replacement. What is the probability of choosing 4 hearts in a row?
   - A. 13/52
   - B. 1/16
   - C. 1/256
   - D. None of the above

7. A nationwide survey showed that 65% of all children in the United States dislike eating vegetables. If 4 children are chosen at random, what is the probability that all 4 dislike eating vegetables? (Round your answer to the nearest percent)
   - A. 18%
   - B. 260%
   - C. 2%
   - D. None of the above

8. In Europe, 88% of all households have a television. 51% of all households have a television and a VCR. What is the probability that a household has a VCR given that it has a television?
   - A. 173%
   - B. 58%
   - C. 42%
   - D. 36%

9. In New England, 84% of the houses have a garage and 65% of the houses have a garage and backyard. What is the probability that a house has a backyard given that it has a garage?
   - A. 77%
   - B. 109%
   - C. 19%
   - D. None of the above

10. A spinner has 7 equal sectors number 1 to 7. If you spin the spinner, then which of the following is a certain event?
    A. Landing on a number less than 7
    B. Landing on a number less than 8
    C. Landing on a number greater than 1
    D. None of the above

11. Find the range of these distances run by 6 marathon runners: 10 km, 15 km, 12 km, 14 km, 8 km, 16 km
    A. 8 km
    B. 6 km
    C. 11 km
    D. 17 km

12. Employees at a retail store are paid the hourly wages listed below. What is the range of these hourly wages? $7.50, $9.25, $8.75, $9.50, $7.25, $8.50
    A. $7.50
    B. $3.75
    C. $2.25
    D. $1.75

13. The test scores of 9 seventh grade students are listed below. Find the mode. 82, 92, 75, 91, 92, 89, 95, 100, 86
    A. 77
    B. 92
    C. 95
    D. 86

14. The manager of video shop recorded the number of blank tapes sold per day in 2 weeks (below). Which of the following statements is true? 132, 121, 119, 116, 130, 121, 131, 117, 119, 135, 121, 129, 119, 134
    A. There is no mode.
    B. The mode is 119
    C. The mode is 131
    D. The modes are 119 and 121

15. Ten earthquakes were measured using the Richter scale and their magnitudes are listed below. Which of the following statements is true? 7.0, 6.2, 7.7, 8.0, 6.4, 7.2, 5.4, 6.6, 7.5, 5.9
    A. There is no mode'
    B. The mode is 6.4
    C. The mode is 5.4
    D. The data set is bimodal

16. A small company has limited budget for salaries. It can afford to pay an average of $35,000 a year to its employees. If the first 5 employees are paid $37,000, $38,000, $33,000, $39,000 and $29,000, then how much money can they pay the sixth employee without exceeding their budget?
    A. $38,000
    B. $36,000
    C. $34,000
    D. $35,000

17. In problem 16, what would the mean salary be if the sixth was paid $40,000?
    A. $36,000
    B. $40,000
    C. $37,000
    D. $42,000

18. The mean of 5 hourly wages is $5.95. What is the sum of these wages?
    A. $41.00
    B. $35.00
    C. $29.75
    D. $32.50

19. Find the range of these race times given in seconds: 7.3s, 8.4s, 8.0s, 7.5s, 9.4s, 8.7s, 9.1s
    A. 2.1 s.
    B. 3.0 s.
    C. 7.0 s.
    D. 1.2 s.

20. The mean of a set of numbers is 123. The sum of the numbers is 2,214. How many numbers are in the set?
    A. 12
    B. 16
    C. 18
    D. 20

Answer Key

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