1. The weights of all the students in grade 9 are arranged from least to greatest. Which statistical measure separates the top half of this set of data from the bottom half?

    [A]   mean   [B]   median   [C]   average   [D]   Mode

2. Rosario and Enrique are in the same mathematics class. On the first five tests, Rosario received scores of 78, 77, 64, 86, and 70. Enrique received scores of 90, 61, 79, 73, and 87. How much higher was Enrique's average than Rosario's average?

    [A]   4 points   [B]   3 points   [C]   2 points   [D]   15 points

3. On an English examination, two students received scores of 90, five students received 85, seven students received 75, and one student received 55. The average score on this examination was

    [A]   77   [B]   75   [C]   76   [D]   79

4. Seth bought a used car that had been driven 20,000 miles. After he owned the car for 2 years, the total mileage of the car was 49,400. Find the average number of miles he drove *each month* during those 2 years.

5. What was the median high temperature in Middletown during the 7-day period shown in the table below?

    [A]   75

    [B]   69

    [C]   70

    [D]   73

Daily High Temperature in Middletown	
Day	Temperature (°F)
Sunday	68
Monday	73
Tuesday	73
Wednesday	75
Thursday	69
Friday	67
Saturday	63

6. Sara's test scores in mathematics were 64, 80, 88, 78, 60, 92, 84, 76, 86, 78, 72, and 90. Determine the mean, the median, and the mode of Sara's test scores.

7. The accompanying graph shows the high temperatures in Elmira, New York, for a 5- day period in January. Which statement describes the data?

    [A]   mean < mode

    [B]   median = mode

    [C]   median = mean

    [D]   mean = mode
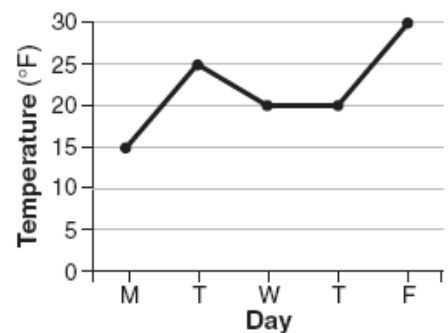
8. Alex earned scores of 60, 74, 82, 87, 87, and 94 on his first six algebra tests. What is the relationship between the measures of central tendency of these scores?

    [A]   mean < median < mode   [B]   mean < mode < median   [C]   mode < median < mean   [D]   median < mode < mean

9. From January 3 to January 7, Buffalo recorded the following daily high temperatures: 5°, 7°, 6°, 5°, and 7°. Which statement about the temperatures is true?

    [A] mean < median   [B] median = mode   [C] mean = median   [D] mean = mode

10. Which statement is true about the data set 3, 4, 5, 6, 7, 7, 10?

    [A] mean > mode   [B] mean < median   [C] mean = median   [D] mean = mode

11. The ages of five children in a family are 3, 3, 5, 8, and 18. Which statement is true for this group of data?

    [A] mode > mean   [B] median > mean   [C] mean > median   [D] median = mode

12. Melissa's test scores are 75, 83, and 75. Which statement is true about this set of data?

    [A] mode < median   [B] mode = median   [C] mean = median   [D] mean < mode

13. The mean (average) weight of three dogs is 38 pounds. One of the dogs, Sparky, weighs 46 pounds. The other two dogs, Eddie and Sandy, have the same weight. Find Eddie's weight.

14. If 6 and x have the same mean (average) as 2, 4, and 24, what is the value of x?

    [A] 5   [B] 10   [C] 36   [D] 14

15. In his first three years coaching baseball at High Ridge High School, Coach Batty's team won 7 games the first year, 16 games the second year, and 4 games the third year. How many games does the team need to win in the fourth year so that the coach's average will be 10 wins per year?

    [A] 13   [B] 3   [C] 10   [D] 9

16. The students in Woodland High School's meteorology class measured the noon temperature every school day for a week. Their readings for the first 4 days were Monday, 56°; Tuesday, 72°; Wednesday, 67°; and Thursday, 61°. If the mean (average) temperature for the 5 days was exactly 63°, what was the temperature on Friday?

17. TOP Electronics is a small business with five employees. The mean (average) weekly salary for the five employees is $360. If the weekly salaries of four of the employees are $340, $340, $345, and $425, what is the salary of the fifth employee?

18. Juan received scores of 82, 76, 93, and 80 on his first four chemistry tests of the year. His goal is to have an 86 average in chemistry for his first five tests. What score must he earn on the next test to achieve an average of exactly 86?

19. During each marking period, there are five tests. If Vanita needs a 65 average to pass this marking period and her first four grades are 60, 72, 55, and 80, what is the lowest score she can earn on the last test to have a passing average?

   [A] 65   [B] 80   [C] 100   [D] 58

20. The exact average of a set of six test scores is 92. Five of these scores are 90, 98, 96, 94, and 85. What is the other test score?

   [A] 89   [B] 91   [C] 86   [D] 92

21. On his first 5 biology tests, Bob received the following scores: 72, 86, 92, 63, and 77. What test score must Bob earn on his sixth test so that his average (mean score) for all six tests will be 80?

22. Judy needs a mean (average) score of 86 on four tests to earn a midterm grade of B. If the mean of her scores for the first three tests was 83, what is the *lowest* score on a 100-point scale that she can receive on the fourth test to have a midterm grade of B?

23. On the first six tests in her social studies course, Jerelyn's scores were 92, 78, 86, 92, 95, and 91. Determine the median and the mode of her scores. If Jerelyn took a seventh test and raised the mean of her scores exactly 1 point, what was her score on the seventh test?

24. Angelo, Brandon, and Carl work in the same office. Angelo's age is 4 years more than twice Carl's age. Brandon is 5 years younger than Carl. The average of the three ages is 41. Find the age of *each* of the men.

25. The mean of three numbers is 25. The second number is four less than twice the first. The third number is two more than four times the first. Find the *smallest* number.