

1. Three seedless watermelons cost \$27. If Pablo buys 4 seedless watermelons at that same unit price, how much will he pay?

A. \$9
B. \$32
C. \$36
D. \$108

2. What is the least common multiple of 5 and 6?

A. 15
B. 18
C. 25
D. 30

3. Muna has a piece of string that is $4\frac{2}{3}$ yards long. If she cuts it into pieces that are each $\frac{2}{3}$ yard long, how many pieces of string will she have?

A. 14
B. 7
C. 4
D. 3

4. A soccer coach wants to order soccer balls online for her team. The soccer balls cost \$9 each and there is a shipping charge of \$10. If s represents the number of soccer balls that the coach buys, which expression can be used to find the total cost of the soccer balls?

A. $\frac{s}{9} + 10$
B. $s + 19$
C. $19s$
D. $9s + 10$

5. Jamal recorded the daily high temperatures over a two-week period.

68°F, 75°F, 60°F, 69°F, 73°F,
74°F, 69°F, 70°F, 70°F, 65°F,
70°F, 71°F, 77°F, 71°F

What is the interquartile range of the data?

A. 4
B. 5
C. 6
D. 17

6. Which is a coefficient in the expression $(3 \times 5) + 4x$?

A. x
B. 3
C. 4
D. 5

7. The table below shows how many of each flower Riley picked from her garden today.

Type of Flower	Number Picked
Tulips	12
Roses	6
Daffodils	8

Which ratio compares the number of daffodils picked to the number of tulips picked?

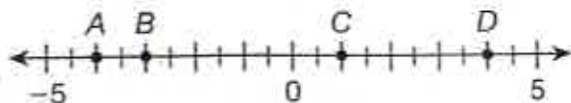
- A. 1:2
 B. 2:3
 C. 3:4
 D. 3:2
8. The surface area of a cube can be found with the formula $A = 6s^2$. If $s = 9$ cm, what is the surface area of the cube?
- A. 54 cm^2
 B. 81 cm^2
 C. 486 cm^2
 D. 729 cm^2
9. The expression $8a + 5c$ can be used to find the cost of an all-you-can-eat buffet lunch for a adults and c children. What is the cost of the lunch for 2 adults and 4 children?
- A. \$36
 B. \$42
 C. \$78
 D. \$136

10. Nora recorded her bowling scores for the month in the table below.

120	98	125	111	117
106	101	118	90	123
124	96	103	115	127

If she makes a histogram with intervals of 90–99, 100–109, 110–119, and 120–129, what is the height of the bar for the interval 120–129?

- A. 1
 B. 2
 C. 3
 D. 5
11. Which point on the number line represents -4 ?



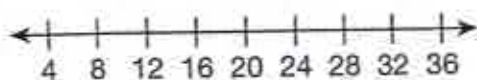
- A. point A
 B. point B
 C. point C
 D. point D

12. Bruce recorded the weights in pounds of the fish caught in a fishing contest. His data is shown below.

27, 34, 19, 8, 15, 32,
20, 24, 36, 30, 17

Make a box plot to display the data.

Weight of Fish (in pounds)



13. Which of the following is a statistical question?
- A. How tall is the governor of our state?
 - B. How many foreign countries have you visited?
 - C. What is the temperature right now?
 - D. What are the colors of the U.S. flag?
14. Shawn is shopping for a rug for his dining room. The rectangular rug he likes measures 5 feet by 7 feet. What is the area of the rug?
- A. 24 feet
 - B. 24 square feet
 - C. 35 feet
 - D. 35 square feet

15. Daniel rides his bicycle at a rate of 7 miles per hour. At that rate, how long would it take him to ride 28 miles?

- A. 3 hours
- B. 4 hours
- C. 7 hours
- D. 21 hours

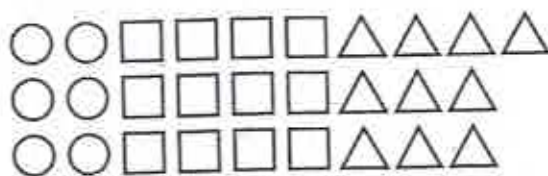
16. Which is the opposite of -15 ?

- A. 51
- B. 15
- C. -15
- D. -51

17. Evan has 36 trading cards. This is 12 more trading cards than Max has. The equation $m + 12 = 36$ can be used to find how many trading cards Max has. How many trading cards does Max have?

- A. 48
- B. 24
- C. 14
- D. 3

18. Look at the figure below.



For every 3 circles, how many triangles are there?

- A. 2
- B. 4
- C. 5
- D. 6

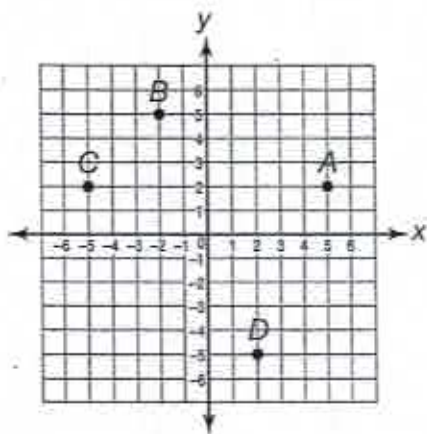
19. What is the product of 0.85×0.37 ?

- A. 1.314
- B. 0.673
- C. 0.52
- D. 0.3145

20. What expression represents seven less than five times a number?

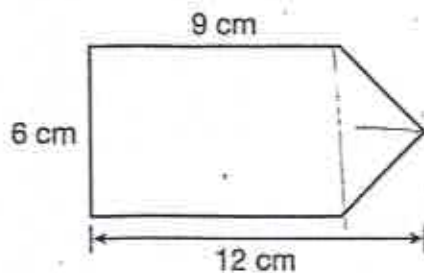
- A. $5 - 7a$
- B. $7a - 5$
- C. $7 - 5a$
- D. $5a - 7$

21. Which point is located at $(-5, 2)$ on the coordinate grid?



- A. point A
- B. point B
- C. point C
- D. point D

22. What is the area of this figure?



- A. 42 cm^2
- B. 63 cm^2
- C. 66 cm^2
- D. 72 cm^2

23. Which sentence is true?

- A. $|-10| > |7|$
- B. $|-8| < |-2|$
- C. $|5| < |-1|$
- D. $|-4| > |-6|$

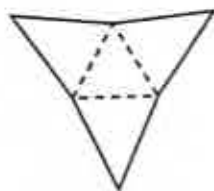
24. Kendra has 9 trophies displayed on shelves in her room. This is $\frac{1}{3}$ as many trophies as Dawn has displayed. The equation $\frac{1}{3}d = 9$ can be used to find how many trophies Dawn has. How many trophies does Dawn have?

- A. 3
- B. 12
- C. 27
- D. 33

25. The daily profits for a bake sale at a school one week were \$120, \$95, \$120, \$85, and \$100. What are the mean and median of the data?

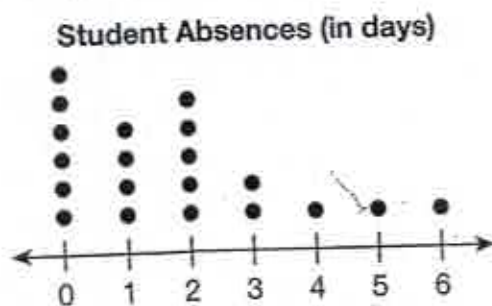
- A. mean: \$104, median: \$120
- B. mean: \$104, median: \$100
- C. mean: \$100, median: \$104
- D. mean: \$100; median: \$120

26. What solid figure can be made from this net?



- A. triangular pyramid
 - B. square pyramid
 - C. rectangular prism
 - D. triangular prism
27. A shirt company packs 24 shirts in a box. How many boxes do they need to pack 14,568 shirts?
- A. 67
 - B. 607
 - C. 670
 - D. 6,007

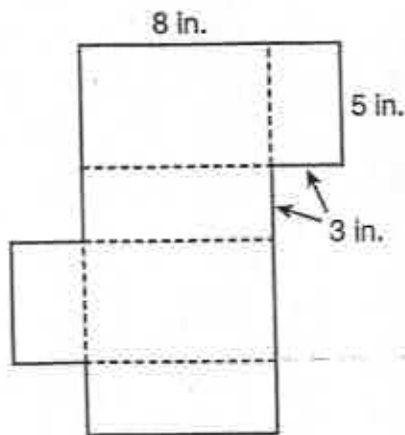
28. The dot plot shows the number of days each student was absent from Miss Jordan's class during one month.



Which statement is **not** true?

- A. The data clusters from 0 to 2 days.
 - B. The mode is 0 days.
 - C. There are 25 students in Ms. Jordan's class.
 - D. There is no gap in the data.
29. What is the greatest common factor of 63 and 36?
- A. 3
 - B. 6
 - C. 9
 - D. 18

30. Shari made a net of a box to find how much wrapping paper she will need to wrap the box.



What is the least amount of wrapping paper she can use to cover all the surfaces?

- A. 79 in.^2
 B. 120 in.^2
 C. 158 in.^2
 D. 240 in.^2
31. Which shows how you can check that $\frac{7}{12} \div \frac{5}{8} = \frac{14}{15}$?

- A. $\frac{14}{15} \div \frac{5}{8} = \frac{7}{12}$
 B. $\frac{14}{15} \div \frac{7}{12} = \frac{5}{8}$
 C. $\frac{5}{8} \times \frac{14}{15} = \frac{7}{12}$
 D. $\frac{8}{5} \times \frac{14}{15} = \frac{7}{12}$

32. A recipe for snack mix has a ratio of 2 cups nuts, 4 cups pretzels, and 3 cups raisins. How many cups of nuts are there for each cup of raisins?

- A. $\frac{2}{3}$ cup
 B. $\frac{1}{2}$ cup
 C. $\frac{1}{3}$ cup
 D. $\frac{3}{4}$ cup

33. The table shows the number of chairs and tables needed for a banquet.

Tables and Chairs

Tables	2	3	4	?
Chairs	16	24	32	48

How many tables are needed for 48 chairs?

34. Which expression is equivalent to $7(n + 5)$?
- A. $35n$
 B. $n + 35$
 C. $12n$
 D. $7n + 35$

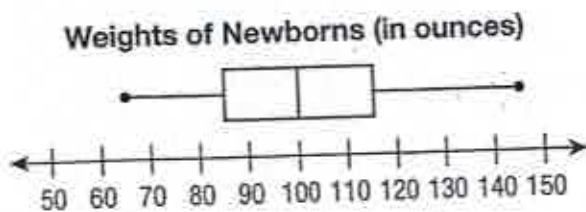
35. Twenty-eight sixth graders play basketball at J.R. Middle School. 20% of all sixth graders at J.R. play basketball. What is the total number of sixth graders at the school?

- A. 140
- B. 120
- C. 90
- D. 75

36. For which set of data would the median be best to describe the data?

- A. the selling price of a loaf of bread
- B. the weights of the boys on the wrestling team
- C. the selling price of a used car
- D. the number of students in each class at your school

37. The box plot shows the weights of newborn babies at a hospital.



What is the median weight of the newborn babies, in pounds?

- A. 4 pounds 1 ounce
- B. 6 pounds 4 ounces
- C. 7 pounds 3 ounces
- D. 8 pounds 4 ounces

38. Which situation would you describe with a negative number?

- A. a kite that is 30 feet above the ground
- B. a withdrawal of \$50 from a savings account
- C. a temperature of 20°F
- D. an elevator on the 25th floor of a building

39. Describe the expression $25^2 + 7n$ in words.

40. Which expression is equivalent to the expression below?

$$x + x + x$$

- A. $x \times 2x$
- B. $3 + x$
- C. $3x$
- D. $2(x + x)$

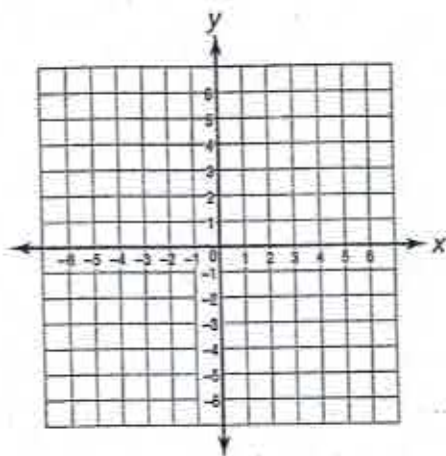
41. The mean absolute deviation (MAD) of the data below is 6.4.

$$24, 19, 16, 33, 33$$

How much greater than the MAD is the interquartile range of the data?

- A. 9.1
- B. 11.1
- C. 17.6
- D. 26.6

42. Plot and label point P at $(-5, 3)$ on the coordinate grid.



43. What is the quotient of $\frac{3}{4} \div \frac{5}{6}$?

- A. $\frac{2}{3}$
- B. $\frac{4}{5}$
- C. $\frac{7}{8}$
- D. $\frac{9}{10}$

44. Which expression represents the statement below?

6 times the sum of a number and 5

- A. $6(5 + x)$
- B. $x(5 + 6)$
- C. $5x + 6$
- D. $6x + 5$

45. One day, the low temperature in Minneapolis, Minnesota was 5°F below zero and the high temperature was 2°F above zero. Which of the following correctly compares these two temperatures?

- A. $-5 > 2$
- B. $-5 < -2$
- C. $5 > 2$
- D. $-5 < 2$

46. A recipe calls for 2 cups of water for every 5 cups of flour. How many cups of water are needed for 1 cup of flour?

- A. $2\frac{1}{2}$ cups
- B. 2 cups
- C. $\frac{1}{2}$ cup
- D. $\frac{2}{5}$ cup

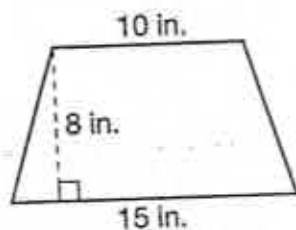
47. Julia paid \$120 for 6 gift cards. Each gift card was the same price. Which shows the equation that represents the situation and the price of each card?

- A. $\frac{g}{6} = 120$; \$720
- B. $6g = 120$; \$20
- C. $g - 6 = 120$; \$126
- D. $g + 6 = 120$; \$114

48. Which is equivalent to $|-30|$?

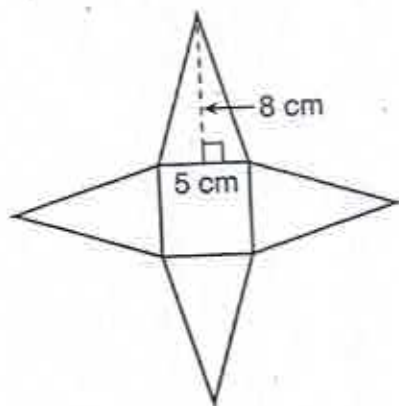
- A. -30
- B. -3
- C. 3
- D. 30

49. Raoul drew the trapezoid below.



What is the area of the trapezoid?

50. The net of a square pyramid is shown below.



What is the surface area of the pyramid?

- A. 80 cm^2
- B. 100 cm^2
- C. 105 cm^2
- D. 185 cm^2

51. What is the quotient of $1,311 \div 57$?

- A. 26
- B. 25
- C. 23
- D. 20

52. The equation for the volume of a cube is $V = s^3$, where s is the side length. What is the volume of a cube with a side length of $14\frac{1}{2}$ feet?

- A. $43\frac{1}{2} \text{ ft}^3$
- B. $2,744 \text{ ft}^3$
- C. $3,048\frac{5}{8} \text{ ft}^3$
- D. $3,375 \text{ ft}^3$

54. The equation $y = x - 4$ describes how the variables x and y are related.

A. Complete the table of values below for $y = x - 4$. Show all your work.

x	$y = x - 4$	y	(x, y)
4			
5			
6			
7			

B. Graph $y = x - 4$ on the coordinate grid below. Explain in words how you graphed the equation.

