

TEST NAME: 6th Grade EOG Practice Final
TEST ID: 3144146
GRADE: 06 - Sixth Grade
SUBJECT: Mathematics
TEST CATEGORY: My Classroom

Student: _____

Class: _____

Date: _____

1. What is the greatest whole number less than $\left(\frac{2}{3}\right)^2 \div \left(\frac{1}{2}\right)^3$?
 - A. 1
 - B. 3
 - C. 5
 - D. 7

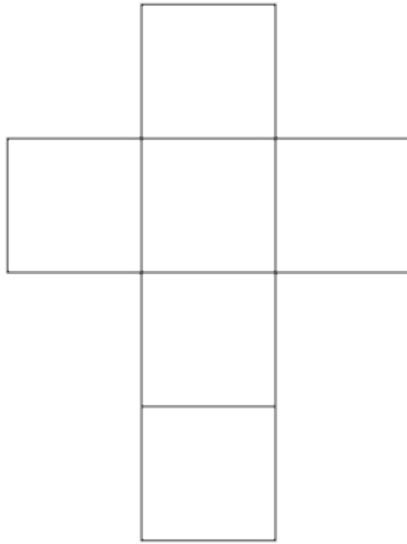
2. Which value from the set $\left\{\frac{1}{2}, \frac{2}{3}, \frac{4}{3}, \frac{5}{2}\right\}$ is a value of x that will make the equation $\frac{3}{4} \div x = \frac{9}{8}$ true?
 - A. $\frac{1}{2}$
 - B. $\frac{2}{3}$
 - C. $\frac{4}{3}$
 - D. $\frac{5}{2}$

3. What is the value of the $\left(\frac{1}{2}\right)^4 \times 32$?
 - A. 1
 - B. 2
 - C. 4
 - D. 64

4. Which scenario can be represented by the equation $x - 16 = 30$?
- A. A toy weighs 30 ounces. How many pounds is this?
 - B. Danny had 30 marbles. He gave 16 of them away. How many does he have now?
 - C. Anna weighs 30 kilograms. This is 16 kg less than her brother. How much does Anna's brother weigh?
 - D. Jane worked 30 hours on a project. Harry worked 16 hours less than Jane. How many hours did Harry work?
5. There are three times as many pine trees as there are oak trees in a forest. If n represents the number of pine trees, which expression represents the number of oak trees?
- A. $3n$
 - B. $n + 3$
 - C. $3 \div n$
 - D. $n \div 3$
6. Rectangle $LMNO$ has 3 vertices located at $L(3, 4)$, $M(7, 4)$, and $O(3, -4)$. What is the location of the fourth vertex?
- A. $N(4, -7)$
 - B. $N(7, -4)$
 - C. $N(-4, -7)$
 - D. $N(-7, -4)$
7. What is the volume of a right rectangular prism with the dimensions of 16 ft, $2\frac{1}{4}$ ft, and 4 ft?
- A. 36 ft^3
 - B. 72 ft^3
 - C. 144 ft^3
 - D. 218 ft^3

8. A square checkerboard measuring 8 inches on each side is divided into 64 1-inch by 1-inch red and black squares. Jim wants to create a board of the same size, but make the red and black squares each 2 inches by 2 inches. How many red and black squares will fit on the new board?
- A. 128
 - B. 48
 - C. 32
 - D. 16
9. The vertices of a square are located at $(7, -9)$, $(7, 2)$, $(-4, 2)$, and $(-4, -9)$. What is the length of one side of the square?
- A. 2 units
 - B. 5 units
 - C. 11 units
 - D. 16 units

10. The net of a cube is shown below. The cube has a surface area of 24 ft^2 .



What is the length of one side of the cube?

- A. 2 ft
 - B. 4 ft
 - C. 6 ft
 - D. 12 ft
11. Which combination of electrical charges will result in 3 negative charges?
- A. 6 positive and 3 negative charges
 - B. 6 positive and 2 negative charges
 - C. 6 negative and 3 positive charges
 - D. 6 negative and 2 negative charges
12. Shane's bank account had a balance of \$40. Shane then had two debits of \$13 each and a credit of \$16. Which integer represents the amount of money in Shane's account after the debits and credit?
- A. -43
 - B. -30
 - C. +30
 - D. +43

13. What is the value of $36 \div 3.75$?
- A. 0.096
 - B. 0.96
 - C. 9.6
 - D. 96
14. A school collected 33,704 cans of food for a local charity. The students sorted the cans equally into 22 containers. How many cans of food are in each container?
- A. 1,352
 - B. 1,518
 - C. 1,532
 - D. 1,685
15. Which expression is equal to $68 + 32$?
- A. $2(34 + 18)$
 - B. $4(17 + 6)$
 - C. $4(17 + 8)$
 - D. $8(8 + 4)$

16. The table below shows the prices at different stores for baseballs.

Store	Number of Baseballs	Price
W	3	\$7.38
X	4	\$8.65
Y	6	\$11.10
Z	9	\$17.01

Which store has the lowest price per baseball?

- A. Store W
- B. Store X
- C. Store Y
- D. Store Z

17. Sara is buying flour for her bake shop. The prices of four types of flour are listed in the table below.

Wheat Flour	5 lb for \$12.50
Rice Flour	8 lb for \$24.00
Corn Flour	15 lb for \$33.75
Soy Flour	24 lb for \$55.20

Which type of flour costs the least per pound?

- A. wheat flour
- B. rice flour
- C. corn flour
- D. soy flour

18. Seth listed the sizes and prices of cans of beef stew.

Size of Can (ounces)	Price
18	\$1.99
28	\$2.99
32	\$3.99
40	\$4.99

Which is the least expensive per ounce?

- A. 18 ounce can
- B. 28 ounce can
- C. 32 ounce can
- D. 40 ounce can

19. The data below shows the number of strawberry plants, s , that are in a certain number of boxes, n .

Boxes (n)	2	5	13	16
Strawberry Plants (s)	18	45	117	?

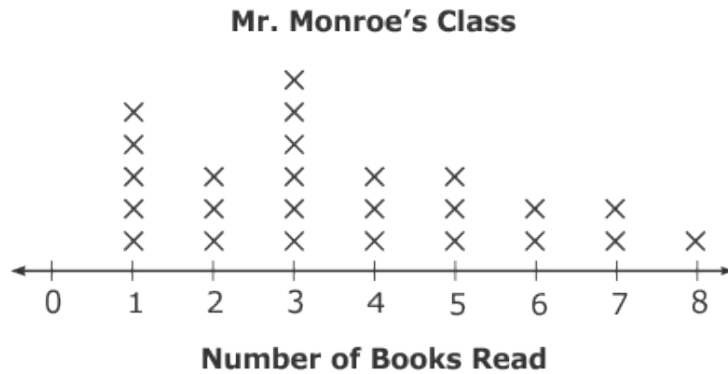
Based on the table, how many strawberry plants will be in 16 boxes?

- A. 120
- B. 144
- C. 189
- D. 234

20. Jeff rode his bicycle 2.75 miles in 12.5 minutes. What was his average rate in miles per hour?

- A. 13.2
- B. 22.0
- C. 27.3
- D. 34.4

21. The line plot below shows how many books each student in Mr. Monroe's class read in last month.



How many students read 4 or more books?

- A. 14
 - B. 11
 - C. 8
 - D. 3
22. Andy runs the same number of miles, x , every day. His total distance run for one week is less than 60 miles. Which inequality represents how many miles Andy runs each day?
- A. $7 + x > 60$
 - B. $7 + x < 60$
 - C. $7x > 60$
 - D. $7x < 60$

23. The table shows the daily amount that Trevor spent on snacks.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	\$0.75	\$0.50	\$1.00	\$1.25	\$0.50
2	\$1.25	\$0.75	\$0.25	\$1.00	\$1.00
3	\$0.50	\$0.75	\$0.25	\$0.25	\$1.25
4	\$1.25	\$0.25	\$0.75	\$1.00	\$0.50

During which week did Trevor spend a mean amount of \$0.85 per day on snacks?

- A. Week 1
- B. Week 2
- C. Week 3
- D. Week 4

24. Sarah earns \$400 per week and spends 15% of her earnings on transportation. How much does Sarah spend on transportation every week?

- A. \$80
- B. \$75
- C. \$60
- D. \$55

25. Jim and Ed are debating the answer to the equation $\frac{2}{3}m = \frac{1}{4}$.

- Jim states that m is equal to $2\frac{2}{3}$.
 - Ed states that m is equal to $\frac{3}{8}$.
-

Which statement is true?

- A. Jim's answer of $2\frac{2}{3}$ is correct because he divided $\frac{2}{3}$ by $\frac{1}{4}$ to get his answer.
- B. Jim's answer of $2\frac{2}{3}$ is correct because he divided $\frac{1}{4}$ by $\frac{2}{3}$ to get his answer.
- C. Ed's answer of $\frac{3}{8}$ is correct because he multiplied $\frac{1}{4}$ by $\frac{2}{3}$ to get his answer.
- D. Ed's answer of $\frac{3}{8}$ is correct because he divided $\frac{1}{4}$ by $\frac{2}{3}$ to get his answer.
26. Tonya pays \$300 each month to rent an office where she earns \$25 per hour tutoring students. Which equation represents Tonya's profit, y , for working x hours?
- A. $y = 25 + 300x$
- B. $y = 25x + 300$
- C. $y = 25 - 300x$
- D. $y = 25x - 300$

27. Seventy-five 6th-grade students chose to watch a movie on the last day of school. This is 25% of the 6th-grade class. How many total students are in the 6th grade?

- A. 100
- B. 200
- C. 300
- D. 400

28. A motorcycle can go 50 miles using one gallon of gas. **About** how many gallons of gas will be used to go 150 kilometers?

(Note: 1 mile is approximately 1.6 kilometers.)

- A. 5 gallons
- B. 3 gallons
- C. 2 gallons
- D. 1 gallon

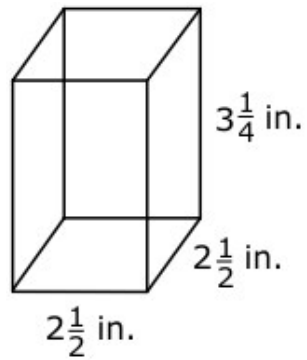
29. Which statement is true?

- A. $0.04 < 0.004$
- B. $8.2 < 8.02$
- C. $7.\overline{6} < 7.67$
- D. $0.0\overline{3} < 0.003$

30. Which value from the set $\left\{\frac{1}{2}, \frac{2}{3}, \frac{4}{3}, \frac{5}{2}\right\}$ is a value of x that will make the equation $\frac{3}{4} \div x = \frac{9}{8}$ true?

- A. $\frac{1}{2}$
- B. $\frac{2}{3}$
- C. $\frac{4}{3}$
- D. $\frac{5}{2}$

31. A right rectangular prism is shown.



What is the volume of the prism?

- A. $8\frac{1}{4}$ in.³
- B. $13\frac{1}{4}$ in.³
- C. $16\frac{1}{4}$ in.³
- D. $20\frac{5}{16}$ in.³

32. In the table, the ratio of y to x is constant.

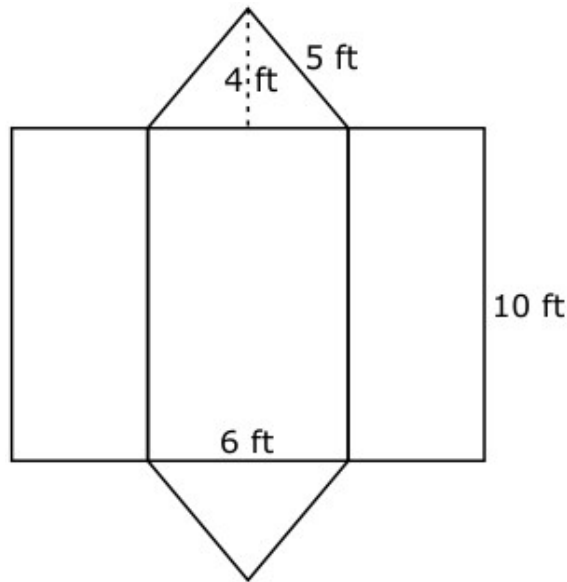
x	y
2	5
4	10
10	?
18	45

What is the value of the missing number?

- A. 15
- B. 20
- C. 25
- D. 30

33. If 45% of a number, n , is 225, what is 74% of n ?
- A. 185
 - B. 298
 - C. 370
 - D. 406
34. Jamal will cut a piece of wood that is $2\frac{1}{2}$ feet long into $\frac{1}{4}$ -foot sections. How many sections will result?
- A. 5
 - B. 8
 - C. 10
 - D. 12
35. Which expression is equivalent to $25x - 10y$?
- A. $5(5x - 2y)$
 - B. $5(5x - 10y)$
 - C. $5(20x - 5y)$
 - D. $5(20x - 10y)$
36. At a middle school, 74 students have freckles. There are 258 students in the school. To the nearest tenth of a percent, what percent of the students have freckles?
- A. 18.4%
 - B. 28.7%
 - C. 34.6%
 - D. 40.2%

37. A net of a three-dimensional figure is shown.



What is the surface area of the three-dimensional figure?

- A. 184 ft^2
 - B. 180 ft^2
 - C. 150 ft^2
 - D. 125 ft^2
38. Which expression represents the sum of twice a number, x , and 15 then decreased by 10?
- A. $2(x + 15 - 10)$
 - B. $(2x + 15) - 10$
 - C. $(2x + 15) + 10$
 - D. $2(x + 15) - 10$
39. What is the value of the expression $r(s + t^2)$, when $r = 3.6$, $s = 12.2$, and $t = 2.2$?
- A. 21.816
 - B. 59.760
 - C. 60.624
 - D. 61.344

40. What is the coefficient in the expression $8 + 2^4 + (5x + 7)$?
- A. 8
 - B. 2
 - C. 5
 - D. 7
41. A batch of cookies requires $1\frac{1}{2}$ cups of brown sugar. How many batches of cookies can be made with $7\frac{1}{2}$ cups of brown sugar?
- A. 5 batches
 - B. 6 batches
 - C. 9 batches
 - D. 11 batches
42. Josh purchased a DVD for \$10.80, before taxes. The price was after a 25% discount. What was the original price of the DVD?
- A. \$2.70
 - B. \$8.10
 - C. \$13.50
 - D. \$14.40
43. A pool has 45 gallons of water in it and is 60% full. How many gallons of water can the pool hold when it is full?
- A. 15 gallons
 - B. 30 gallons
 - C. 75 gallons
 - D. 105 gallons

44. The table below shows the total cost, y , to rent x games from a store.

Number Rented (x)	Cost (y)
2	\$ 7
4	\$14
6	\$21
8	\$28

Which equation can be used to determine the total cost of renting x games?

- A. $y = 1.75x$
- B. $y = 3.50x$
- C. $y = 7.00x$
- D. $y = 14.00x$

45. Casey needs to paint a rectangular wall that measures $3\frac{1}{8}$ feet by $6\frac{1}{2}$ feet. If Casey has painted half of the wall, how many square feet does she still need to paint?

- A. $3\frac{3}{8}$ square feet
- B. $9\frac{5}{8}$ square feet
- C. $10\frac{5}{32}$ square feet
- D. $20\frac{5}{8}$ square feet

46. Melvin drives a delivery truck. His company pays him \$0.48 for every half-mile driven and a \$35 bonus for every 150 miles driven. If Melvin drives 420 miles, how much will he earn, before taxes?

- A. \$236.60
- B. \$271.60
- C. \$438.20
- D. \$473.20

47. What is the value of x in the equation $x + 7.3 = 9.25$?
- A. 1.95
 - B. 2.22
 - C. 9.25
 - D. 16.55
48. Kelsey bought 3 pounds of bananas for \$1.17 and 2 pounds of apples for \$3.38. How much less per pound did the bananas cost than the apples?
- A. \$1.12
 - B. \$1.30
 - C. \$2.21
 - D. \$4.55
49. John spent $3\frac{1}{4}$ hours studying. Frank spent $4\frac{7}{8}$ hours studying. Frank spent how many times the amount of hours studying as John?
- A. $\frac{2}{3}$ times
 - B. $1\frac{1}{2}$ times
 - C. $8\frac{1}{8}$ times
 - D. $15\frac{27}{32}$ times
50. Mr. Kaplin made a wooden pencil box in the shape of a right rectangular prism. The dimensions of the box are 13 inches long, 6 inches wide, and $2\frac{1}{2}$ inches high. What is the volume of the pencil box?
- A. 78 in.³
 - B. 156 in.³
 - C. 195 in.³
 - D. 234 in.³

51. The points $(-4, -4)$, $(4, 4)$, $(-4, 4)$, and $(4, -4)$ form a square on a coordinate plane. How long is each side length of the square?
- A. 12 units
 - B. 10 units
 - C. 8 units
 - D. 4 units

52. If $x + y = 72$ and $x = 53$, what is the value of y ?
- A. 19
 - B. 21
 - C. 106
 - D. 125

53. The table below shows a relationship between x and y .

x	2	3	4	5	6
y	7.2	10.8	14.4	18	21.6

Which equation represents the data in the table?

- A. $5.2 + y = x$
 - B. $5.2 + x = y$
 - C. $3.6y = x$
 - D. $3.6x = y$
54. A full container has $2\frac{1}{2}$ gallons of juice. A serving is $\frac{1}{16}$ gallon of juice. How many servings of juice are in the container?
- A. 16
 - B. 32
 - C. 40
 - D. 80

55. Sixth-grade students were surveyed about their transportation to school. Twenty percent of the students ride the bus. If 60 sixth-grade students ride the bus, how many sixth-grade students attend the school?
- A. 60
 - B. 120
 - C. 300
 - D. 360

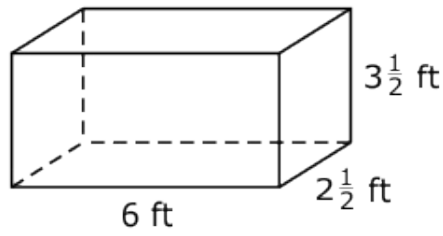
56. What percent of the stars are white?



- A. 6%
 - B. 10%
 - C. 40%
 - D. 60%
57. What is the solution to the inequality $16.2 + n > 19.4$
- A. $n < 3.2$
 - B. $n > 3.2$
 - C. $n < 35.6$
 - D. $n > 35.6$
58. Two friends ordered a pizza for \$14.99, 2 drinks for \$1.99 each, bread sticks for \$4.95, and 2 salads for \$2.98 each. All prices include sales tax. They agreed to split the bill equally. How much did each friend pay?
- A. \$17.42
 - B. \$14.94
 - C. \$13.95
 - D. \$12.46

59. A recipe for salad dressing uses $1\frac{1}{4}$ cups of olive oil. A serving of salad dressing contains $\frac{1}{8}$ cup of olive oil. How many servings are in the recipe?
- A. $1\frac{1}{8}$
- B. $1\frac{3}{8}$
- C. 8
- D. 10
60. Which expression represents the product of a number, n , and 8 decreased by 4?
- A. $(8 + n) - 4$
- B. $4 - 8n$
- C. $8n + 4$
- D. $8n - 4$
61. Ian bought four books that cost \$4.95, \$3.95, \$2.00, and \$0.99. All book prices include sales tax. Ian gave the cashier his money and received \$3.11 back in change. How much money did Ian give the cashier?
- A. \$10.50
- B. \$11.89
- C. \$15.00
- D. \$20.00

62. What is the volume of the right rectangular prism shown below?



- A. 12 ft^3
 - B. 30 ft^3
 - C. $52 \frac{1}{2} \text{ ft}^3$
 - D. $89 \frac{1}{2} \text{ ft}^3$
63. Mr. Dent’s science class is dying T-shirts. Each T-shirt is dyed a single color. Each T-shirt requires $\frac{3}{8}$ cup of dye. The table below shows the number of cups of each color dye Mr. Dent has to use.

Color	Number of Cups
red	3
orange	$1 \frac{3}{4}$
blue	$1 \frac{1}{5}$
green	$\frac{3}{4}$

How many T-shirts can be made using the orange dye?

- A. 8
- B. 4
- C. 3
- D. 2

64. How many terms are in the expression $2x + 8 - 2y + 1$, after all like terms are combined?

- A. 1
- B. 2
- C. 3
- D. 4

65. Which set of values makes the inequality $\frac{3}{5}x \leq 15$ true?

- A. {22, 23, 24, 25}
- B. {23, 24, 25, 26}
- C. {24, 25, 26, 27}
- D. {25, 26, 27, 28}

66. If $x = 2$, $y = 1.5$, and $z = 9$, what is the value of the expression $3xy + 2yz + 10$?

- A. 58
- B. 46
- C. 37
- D. 34

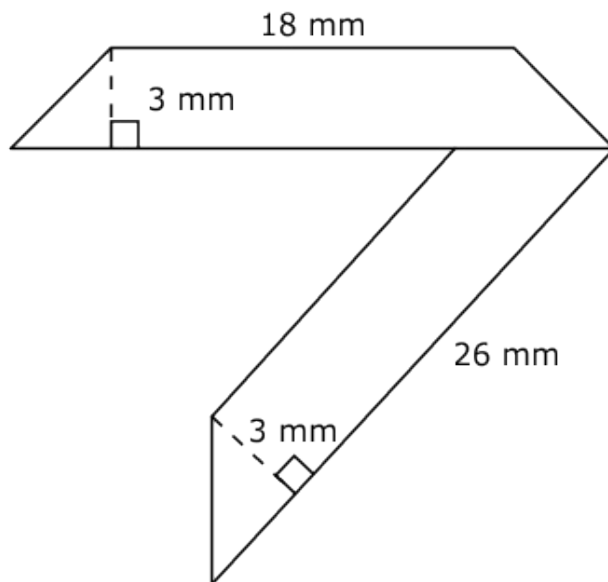
67. What is the value of p in the equation below?

$$0.25p = 6$$

- A. 1.50
- B. 6.25
- C. 12
- D. 24

68. A bag of butterscotch chips contains $2\frac{1}{2}$ cups of chips. A cookie recipe needs $\frac{1}{4}$ cup of butterscotch chips for a dozen cookies. How many dozen cookies can be made from the entire bag of butterscotch chips?
- A. 4 dozen
 - B. 6 dozen
 - C. 8 dozen
 - D. 10 dozen
69. In a computer class, there are 20 computers and 25 students. Each student without a computer will need to share with one other student. What is the percentage of students that will be able to use a computer without sharing?
- A. 80%
 - B. 60%
 - C. 40%
 - D. 20%

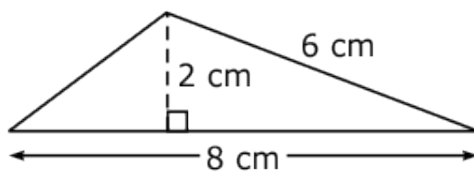
70. The figure below is made up of two congruent trapezoids.



What is the total area of both trapezoids?

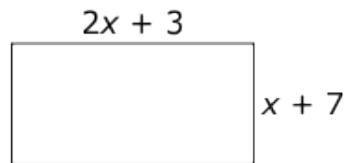
- A. 66 mm^2
- B. 88 mm^2
- C. 132 mm^2
- D. 176 mm^2

71. What is the area of the triangle below?



- A. 6 cm^2
- B. 8 cm^2
- C. 12 cm^2
- D. 16 cm^2

72. What is the perimeter of the rectangle below?



- A. $2x + 21$
- B. $3x + 10$
- C. $4x + 10$
- D. $6x + 20$

73. What is the value of the expression below?

$$0.5^2 + 9.75 - 3^2$$

- A. 1
- B. 1.75
- C. 4
- D. 4.75

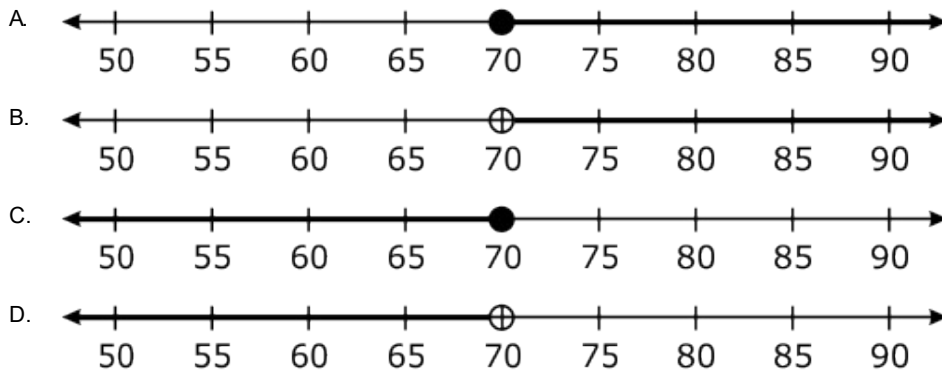
74. What is the value of the $\left(\frac{1}{3}\right)^2 + \frac{1}{9}$

- A. $\frac{4}{9}$
- B. $\frac{1}{3}$
- C. $\frac{5}{18}$
- D. $\frac{2}{9}$

75. Triangle QRS has vertices at $Q(-4, -2)$, $R(-4, 4)$, and $S(4, 4)$. If side QS has a length of 10 units, what is the perimeter of triangle QRS ?

- A. 18 units
- B. 20 units
- C. 24 units
- D. 26 units

76. Kim needs to score higher than a 70 on her science project to get a B in her class. Which graph shows the possible scores Kim could earn to get a B in her class?



77. What is the value of the expression $2^4 + 4^2 \left(\frac{1}{2}\right)^3$?

- A. 9
- B. 10
- C. 17
- D. 18

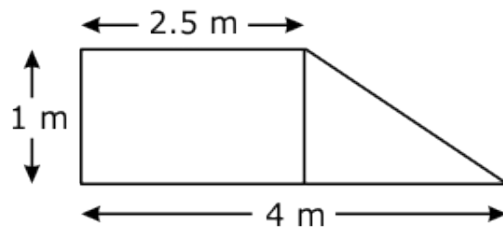
78. What is the value of the expression $5(20 - 8) \div 3 + 7^2$?

- A. 69
- B. 45
- C. 34
- D. 20

79. What is the area of a polygon with vertices located at $(3, 0)$, $(3, -5)$, $(-5, -5)$, and $(-5, 0)$?

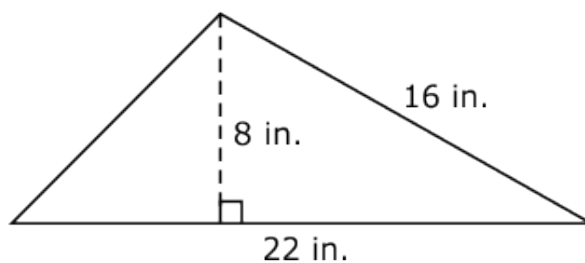
- A. 13 square units
- B. 20 square units
- C. 26 square units
- D. 40 square units

80. What is the area of the figure below?



- A. 10 m^2
- B. 6.5 m^2
- C. 4.5 m^2
- D. 3.25 m^2

81. What is the area of the triangle below?

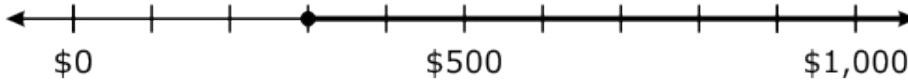


- A. 176 in.^2
- B. 88 in.^2
- C. 64 in.^2
- D. 30 in.^2

82. Which expression represents 8 times the quantity 26 plus a number, m , squared?

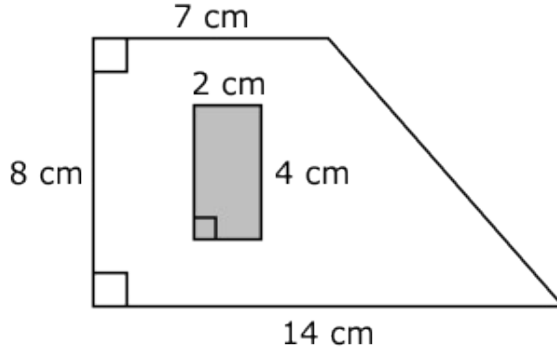
- A. $8 + 26 + m^2$
- B. $8 + (26m^2)$
- C. $8(26m^2)$
- D. $8(26 + m^2)$

83. Which situation is represented by the inequality shown?



- A. A school fundraiser needs to collect between \$300 and \$1,000.
- B. A school fundraiser needs to collect an average of \$500.
- C. A school fundraiser needs to collect more than \$300.
- D. A school fundraiser needs to collect at least \$300.

84. What is the area of the non-shaded space in the trapezoid below?



- A. 76 cm^2
- B. 84 cm^2
- C. 97 cm^2
- D. 104 cm^2

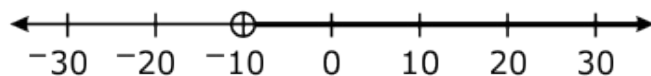
85. What is the value $5 - 8^2 \times \left(\frac{1}{2}\right)^5 + 7$

- A. 2
- B. 4
- C. 6
- D. 10

86. A recipe requires $\frac{1}{8}$ cup of sugar and $\frac{1}{2}$ cup of flour. How many times as much flour is required for the recipe as sugar?

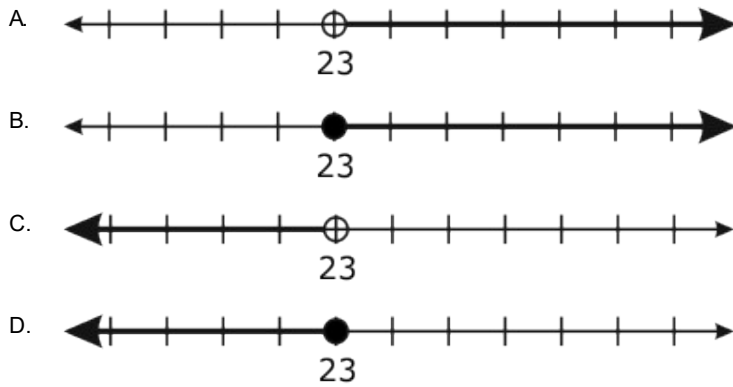
- A. $\frac{1}{16}$ times as much
- B. $\frac{1}{4}$ times as much
- C. 4 times as much
- D. 16 times as much

87. Which inequality is graphed below?

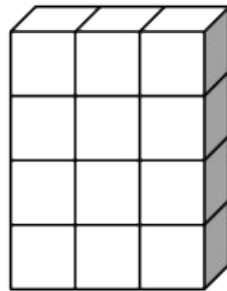


- A. $x \geq -10$
- B. $x > -10$
- C. $x \leq -10$
- D. $x < -10$

88. Jenny has \$45 to spend on flowers and fertilizer. She spent \$22 on fertilizer. Which graph shows the amount of money Jenny has to spend on flowers?



89. The right rectangular prism below is made up of 12 cubes. The edge of each cube measures $\frac{1}{3}$ cm.



What is the volume of the rectangular prism?

- A. $\frac{1}{9}$ cm³
- B. $\frac{4}{9}$ cm³
- C. 4 cm³
- D. 12 cm³

90. Sweet potatoes are on sale for \$0.79 per pound, including tax. If Stuart has \$5, does he have enough money for 8 pounds of sweet potatoes?

- A. Yes, he has \$0.71 left over.
- B. Yes, he has enough to buy 9 pounds.
- C. No, he has enough for 6 pounds.
- D. No, he needs \$0.72 more to buy the potatoes.

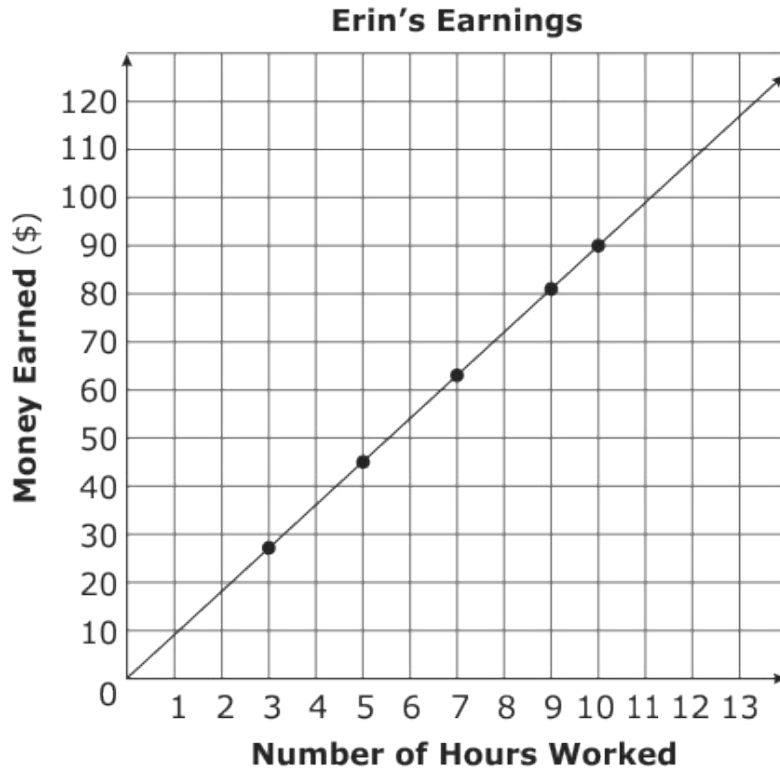
91. A school club sold pizza kits to raise money for a field trip. The table below shows the amount of money the club can raise based on the number of kits sold.

Pizza Kits Sold	Money Raised
11	\$121
13	\$143
15	\$165
17	?
19	\$209

Based on the chart, if a club member sells 17 pizza kits, how much money will he/she raise for the club?

- A. \$173
- B. \$177
- C. \$183
- D. \$187

92. Erin recorded the amount of money she earned, e , based on the number of hours she worked, h , in the graph below.



Which equation would calculate how much Erin earns after working h hours?

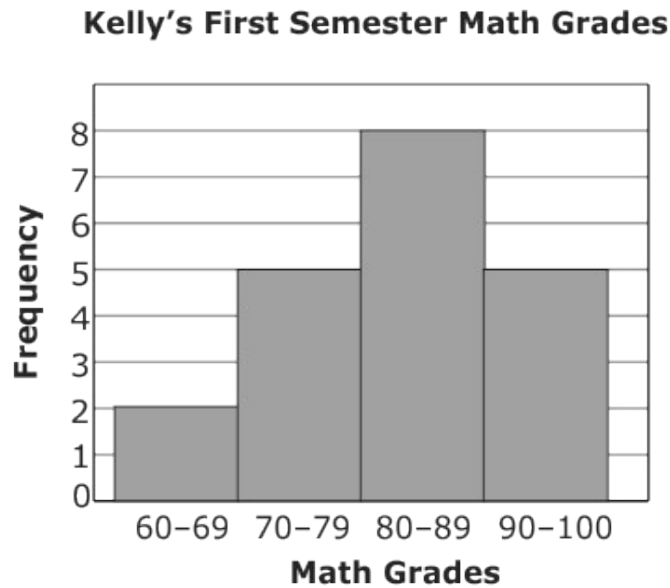
- A. $e = 45h$
 - B. $e = 27h$
 - C. $e = 9h$
 - D. $e = 3h$
93. On the coordinate graph, what is the distance between $X(-6, 6)$ and $Y(3, 6)$?
- A. -3
 - B. 0
 - C. 9
 - D. 12

94. The table shows the amount of money Heidi earned after working a certain number of hours.

Hours Worked	Money Earned
3	9
5	15
7	21

At this rate, how much money would Heidi earn for working 6 hours?

- A. \$14
 - B. \$16
 - C. \$18
 - D. \$20
95. Kelly recorded her math grades from the first semester in the graph below.



Based on the data, how many of her grades were lower than 80?

- A. 2
- B. 5
- C. 7
- D. 8

96. What is the least common multiple of 8 and 10?

- A. 4
- B. 8
- C. 40
- D. 80

97. The heights of the basketball players, in inches, on a team are shown below.

78, 72, 75, 76, 79, 81, 75, 78, 80, 78, 70, 73

What is the median height of the players on the team?

- A. 76 inches
- B. 77 inches
- C. 78 inches
- D. 80 inches

98. The temperature at 6:00 a.m. was -3°C . By noon, the temperature had increased by 7° . What was the temperature at noon?

- A. -10°C
- B. -4°C
- C. 4°C
- D. 10°C

99. A recipe requires 2.5 cups of peaches for 6 servings. What amount of peaches is required for 1 serving?

- A. $\frac{1}{3}$ cup
- B. $\frac{2}{5}$ cup
- C. $\frac{5}{12}$ cup
- D. $\frac{5}{6}$ cup

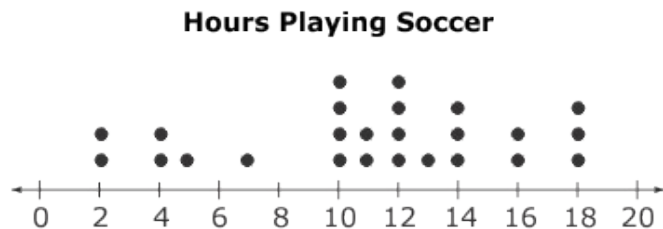
100. Which statement is true?

- A. $-|4| > -5$
- B. $-|-6| < -|-7|$
- C. $-|-5| < -|9|$
- D. $-10 > -|8|$

101. The height of a volcano is approximately 33,000 ft of which 17,976 feet is above sea level. The rest of the volcano is below sea level. Which integer represents the elevation of the volcano below sea level?

- A. $-17,976$ ft
- B. $-15,024$ ft
- C. $+15,024$ ft
- D. $+17,976$ ft

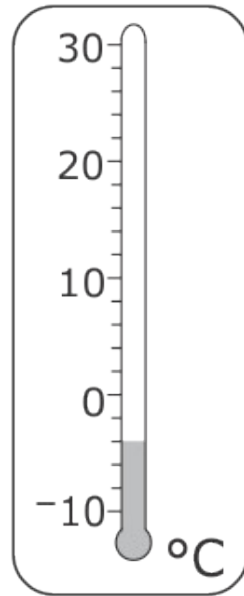
102. David asked the soccer players at his school the number of hours they each spent playing soccer last week. The results are shown in the dot plot below.



How many players spent more than 6 hours, but less than 15 hours, playing soccer?

- A. 10
- B. 14
- C. 15
- D. 20

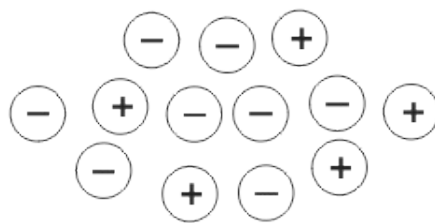
103. The temperature at 6:00 a.m. is shown on the thermometer below.



What is the temperature?

- A. -4°C
- B. -2°C
- C. 2°C
- D. 4°C

104. The picture below shows positive and negative charges.

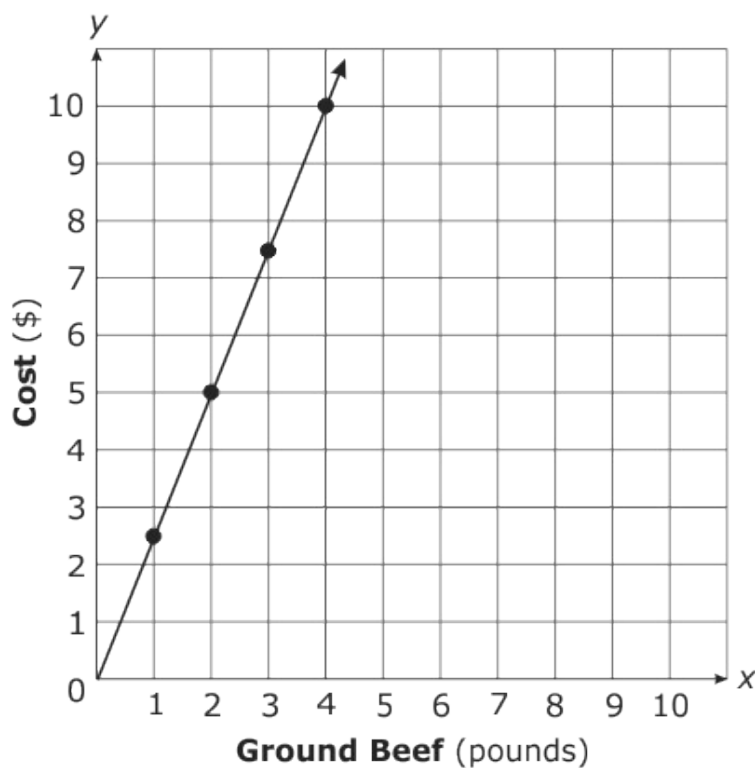


Which integer represents the total value of the charges?

- A. -3
- B. $+3$
- C. -13
- D. $+13$

105. The Salton Trough is 69 meters below sea level. Death Valley is 89 meters below sea level. Which statement is true?
- A. Death Valley is 20 more meters below sea level than the Salton Trough.
 - B. The Salton Trough is 20 more meters below sea level than Death Valley.
 - C. Death Valley is 158 more meters below sea level than the Salton Trough.
 - D. The Salton Trough is 158 more meters below sea level than Death Valley.

106. Lindsey created a graph showing the number of pounds of ground beef, x , and the cost, y .



Based on the graph, which equation will calculate the cost of x pounds of ground beef?

- A. $y = 1.00x$
- B. $y = 1.00x + 2.50$
- C. $y = 2.50x$
- D. $y = 2.50x + 1$

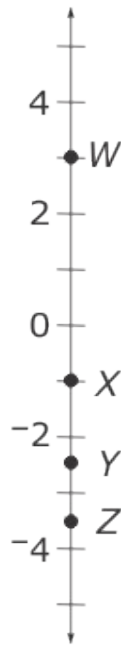
107. Sarah bought 96 pencils and 84 erasers to make gift bags for her friends.

- Each bag will have pencils and erasers.
- Each bag will have the same number of pencils.
- Each bag will have the same number of erasers.

If she uses all the supplies, what is the greatest number of pencils Sarah can put in each bag?

- A. 6
- B. 8
- C. 12
- D. 16

108. Which point on the graph is located at -2.5 ?

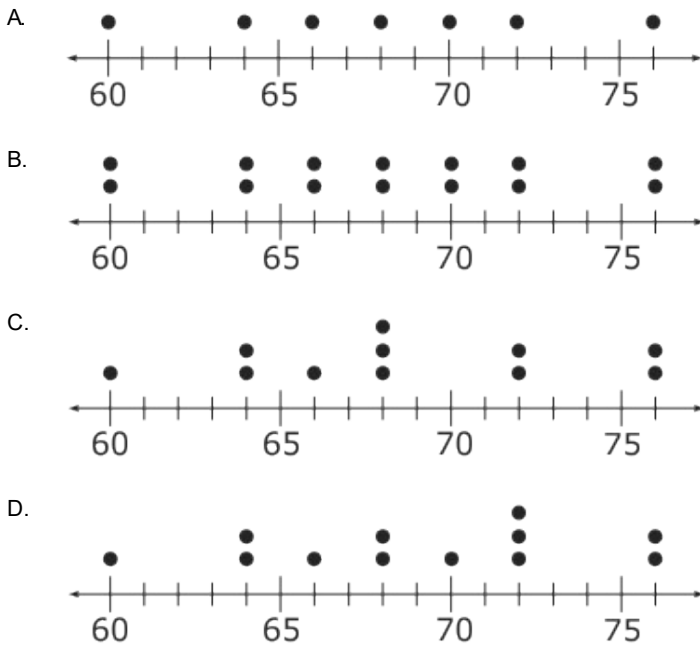


- A. *W*
- B. *X*
- C. *Y*
- D. *Z*

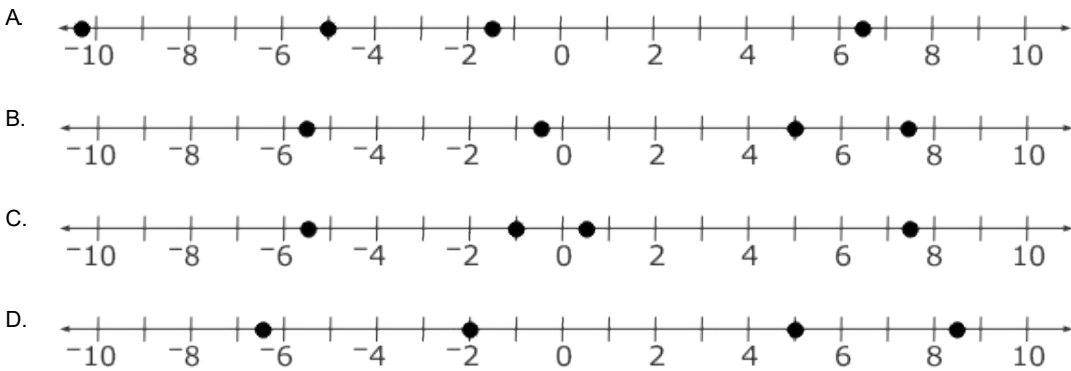
109. Students in health class recorded their heart rates in the list below.

64, 68, 72, 60, 76, 64, 72, 68, 72, 76, 70, 66

Which dot plot accurately displays this data?



110. Which number line shows the graph of the $-\frac{11}{2}$, -0.5 , 5 , $\frac{15}{2}$



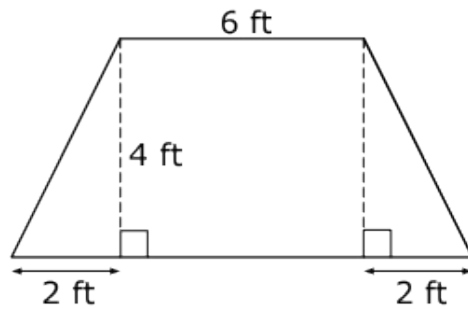
111. Which integers represent a debit of \$7 and a credit of \$5?

- A. +7; +5
- B. +7; -5
- C. -7; +5
- D. -7; -5

112. John has a box shaped like a right rectangular prism. Its dimensions are $\frac{1}{2}$ feet tall, $1\frac{1}{2}$ feet wide, and 3 feet long. What is the volume of the box?

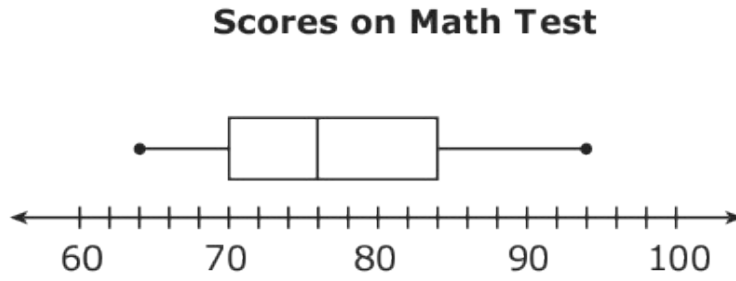
- A. $1\frac{1}{2}$ ft³
- B. $2\frac{1}{4}$ ft³
- C. $4\frac{1}{2}$ ft³
- D. 5 ft³

113. What is the area of the trapezoid below?



- A. 24 ft²
- B. 32 ft²
- C. 40 ft²
- D. 48 ft²

114. The box plot below displays the scores of a math test.



What is the median score of this test?

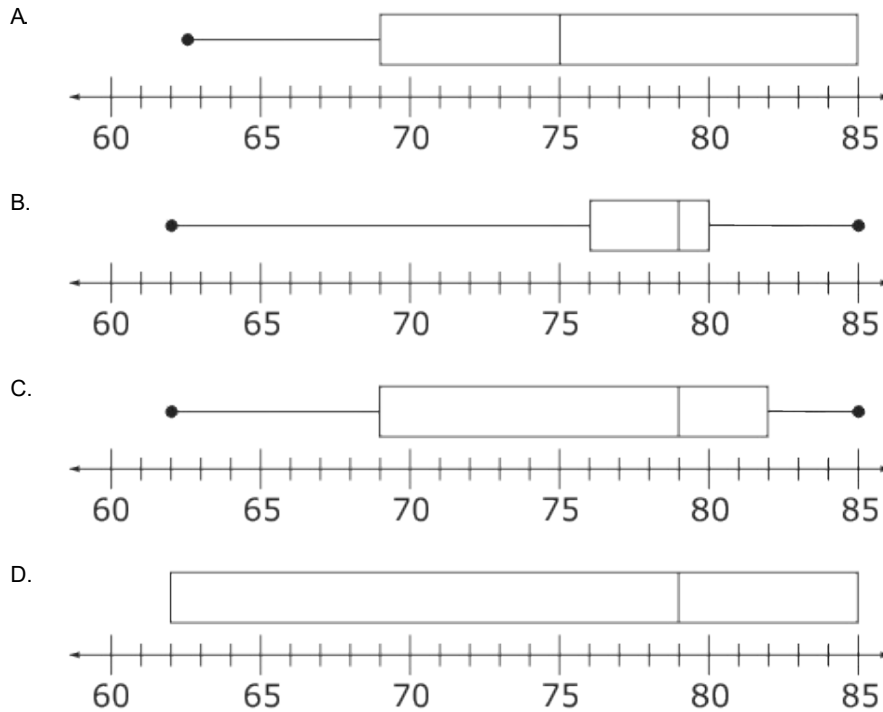
- A. 70
- B. 76
- C. 84
- D. 94

115. A doctor recorded the weights of 10 children, ages 9 to 11, for a research study.

Weights of 10 Children (pounds)

79	85	62	83	76	80	79	69	82	68
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Which box plot represents this data?



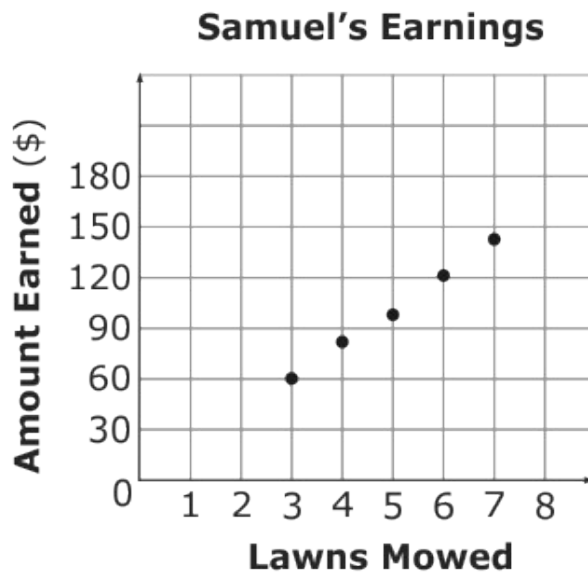
116. How many $\frac{1}{2}$ -cup servings are in $\frac{1}{3}$ -cup of milk?

- A. $\frac{1}{6}$
- B. $\frac{2}{5}$
- C. $\frac{2}{3}$
- D. $1\frac{1}{2}$

117. Which set of data has a range of 9?

- A. 95, 100, 98, 92, 86
- B. 90, 98, 89, 92, 94, 95
- C. 99, 98, 93, 97, 92, 91, 99
- D. 86, 92, 94, 89, 90, 92, 85, 100, 75

118. Samuel mows lawns to earn extra money. The graph below shows Samuel's total earnings, e , based on the number of lawns he mows, m .



Which equation would calculate Samuel's total earnings after m lawns are mowed?

- A. $e = 30m$
- B. $e = 20m$
- C. $m = 30e$
- D. $m = 20e$

119. Michael learned that 32 empty drink cans weigh 1 pound. **About** how many kilograms do 224 empty drink cans weigh? (1 pound \approx 0.45 kilograms)
- A. 3
 - B. 7
 - C. 12
 - D. 16

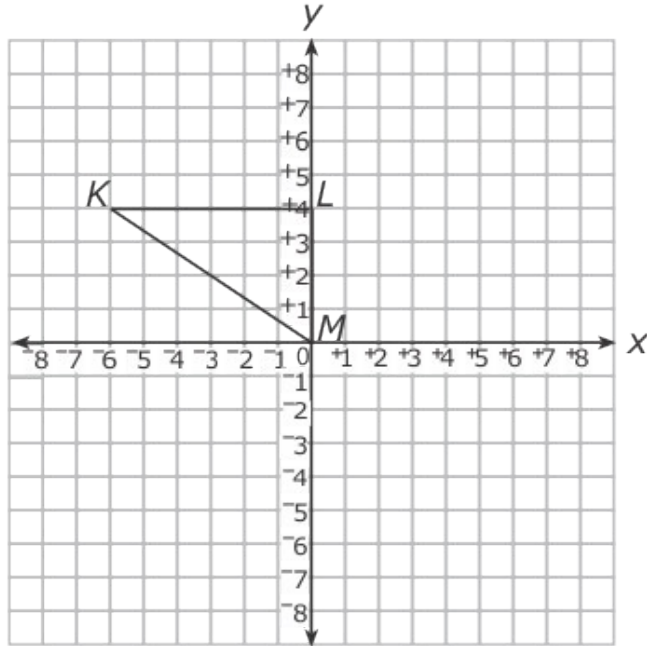
120. The chart below shows the rainfall amounts for one week.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2 in.	6 in.	0 in.	1 in.	1 in.	2 in.	3 in.

What is the ratio of the rainfall amount on Saturday to the total amount of rainfall from Sunday through Friday?

- A. 4 : 1
 - B. 3 : 2
 - C. 1 : 5
 - D. 1 : 4
121. Julius is selling raffle tickets for \$2.50 each. The prizes to be awarded cost \$2,260. Which equation represents the number of raffle tickets, x , that must be sold in order to pay for the prizes?
- A. $2.50x = 2,260$
 - B. $x + 2.50 = 2,260$
 - C. $2.50 = 2,260x$
 - D. $2.50x + 2,260 = 0$

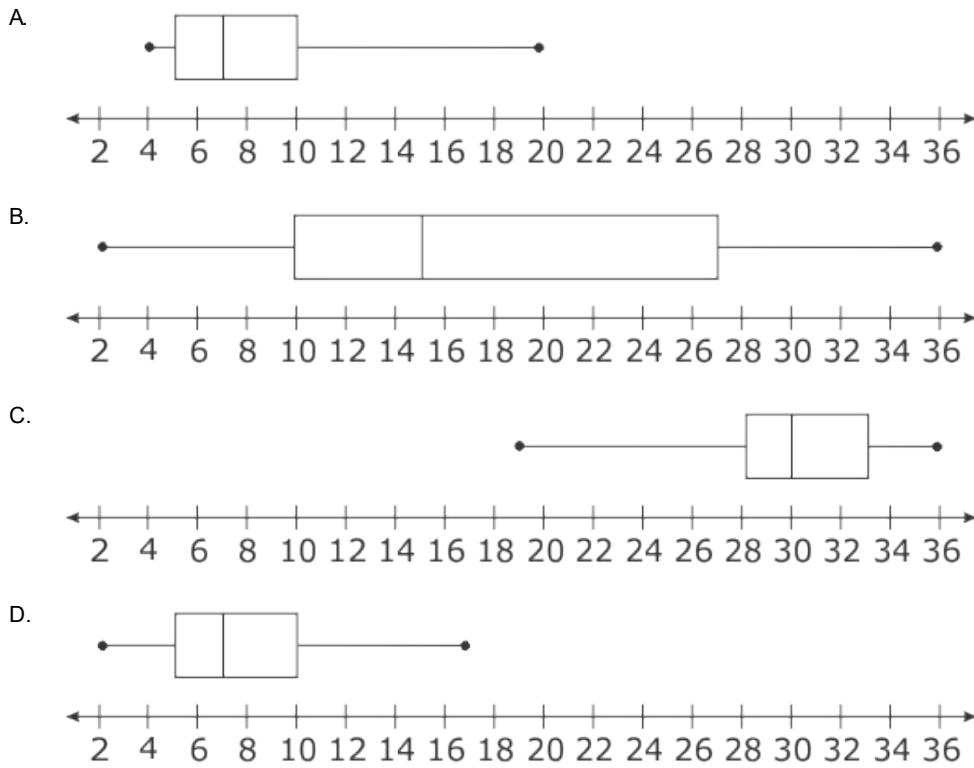
122. Point N , located at $(-6,0)$, is added to the triangle below to form rectangle $KLMN$.



What is the area of rectangle $KLMN$?

- A. 12 units²
- B. 16 units²
- C. 20 units²
- D. 24 units²

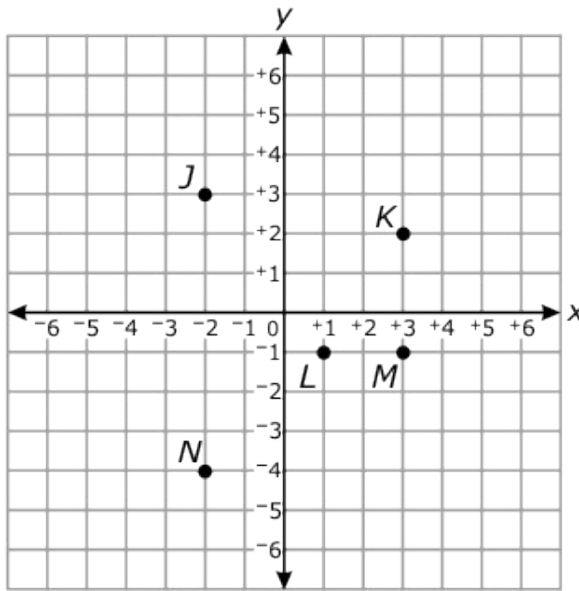
123. Which box plot has a range of 17 and an interquartile range of 5?



124. An art class has 33 students. The ratio of boys to girls is 5 : 6. How many girls are in this class?

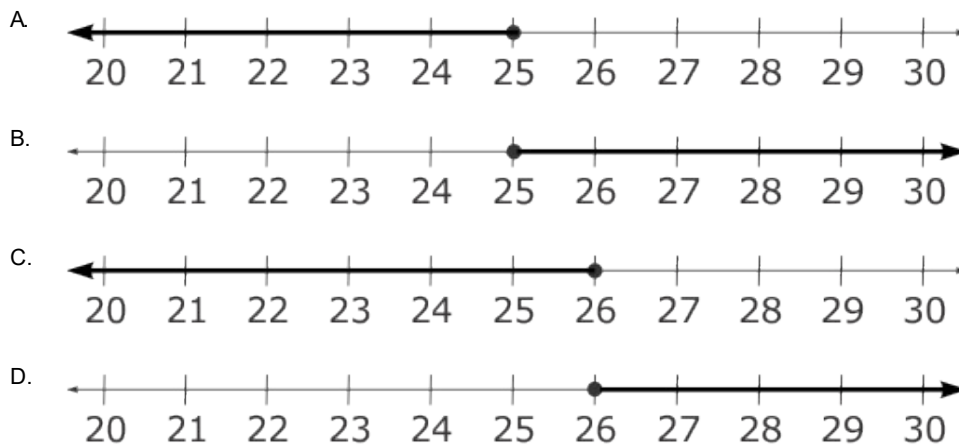
- A. 15
- B. 16
- C. 17
- D. 18

125. A coordinate plane is shown below.



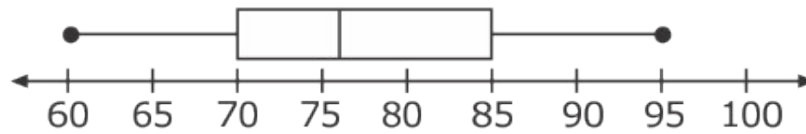
What are the coordinates of point *N*?

- A. (4, -2)
 - B. (2, -4)
 - C. (-2, -4)
 - D. (-4, -2)
126. A 6th-grade class is going on a field trip that costs \$25.00 per student, plus money for food and souvenirs. Students can bring their lunch. Which graph shows the amount of money the field trip will cost for each student?



127. Simon had \$650 to spend on airfare and a hotel. He spent \$331 on airfare. Which inequality represents how much money Simon can spend on the hotel, h ?
- A. $h \geq 650 - 331$
 - B. $h \leq 650 - 331$
 - C. $h + 650 \geq 331$
 - D. $h + 650 \leq 331$

128. The box plot below represents students' scores on a test in Mrs. Moore's class.

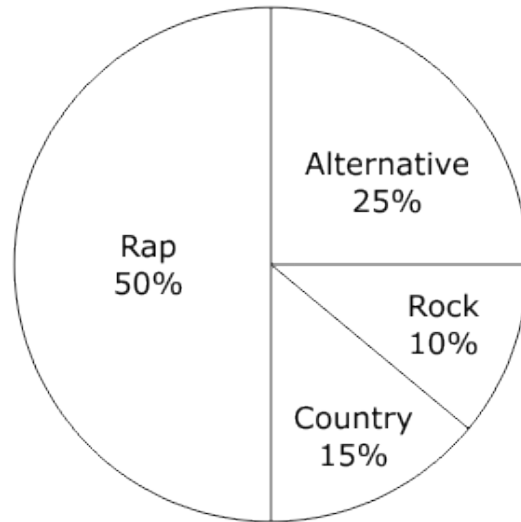


What is the interquartile range of the test scores?

- A. 10
 - B. 15
 - C. 25
 - D. 35
129. What is the value of p in the $p - 2\frac{1}{4} = 4\frac{3}{4}$

- A. $2\frac{1}{2}$
- B. $6\frac{1}{2}$
- C. 7
- D. 9

130. Two hundred middle school students were asked what type of music they like the most. The results are shown in the circle graph below.



How many students enjoy Rap music the **most**?

- A. 25
 - B. 50
 - C. 75
 - D. 100
131. A rectangle has vertices at $(-3, 3)$, $(-3, -1)$, $(4, 3)$, and $(4, -1)$. What is the perimeter of the rectangle?
- A. 11 units
 - B. 14 units
 - C. 18 units
 - D. 22 units

132. There are 18 chaperones and 81 students going on a class field trip.

- All of the students and chaperones will be in a group.
- The same number of students will be in each group.
- The same number of chaperones will be in each group.

What is the greatest number of groups that can be formed?

- A. 2
- B. 3
- C. 9
- D. 18

133. At James Middle School, 500 students were asked their favorite sport to watch on TV.

- 35% of the students like watching basketball.
- 15% of the students like watching baseball.
- 30% of the students like watching soccer.
- The rest of the students like watching football.

How many students like watching football?

- A. 75
- B. 100
- C. 175
- D. 400

134. Which point on the number line has an absolute value of 3?



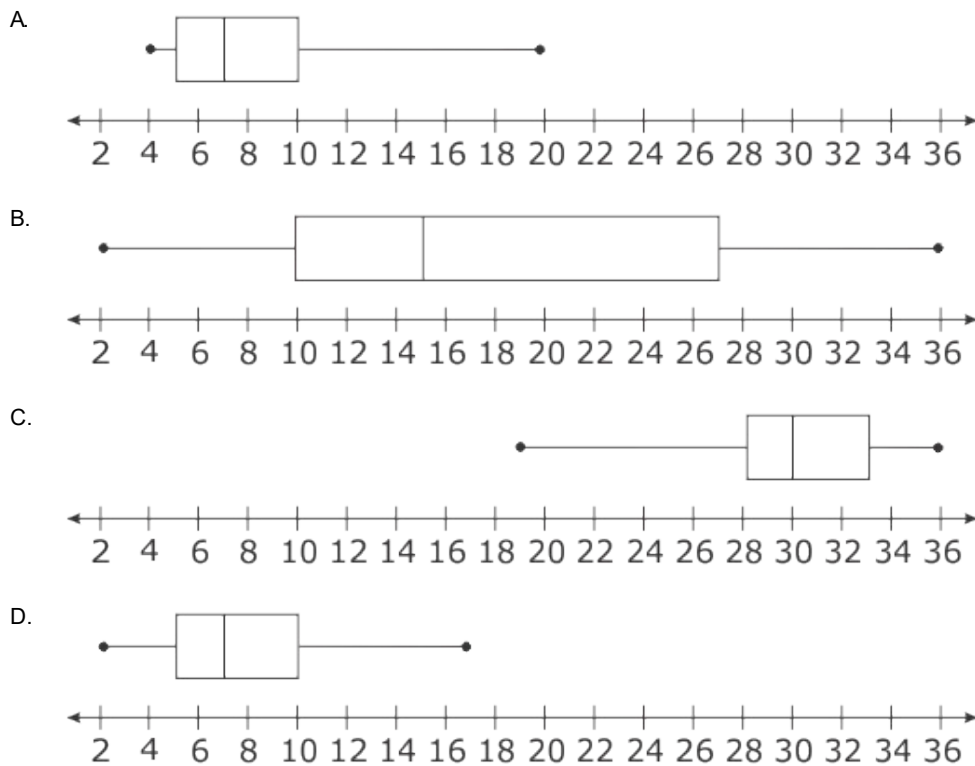
- A. *W*
- B. *X*
- C. *Y*
- D. *Z*

135. Which measure of central tendency **best** describes the center of the data set shown below?

40, 40, 41, 45, 47, 49, 52, 134

- A. mean
- B. median
- C. mode
- D. range

136. Which box plot has a range of 17 and an interquartile range of 5?



137. A doctor recorded the weights of 10 children, ages 9 to 11, for a research study.

Weights of 10 Children (pounds)

79	85	62	83	76	80	79	69	82	68
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Which box plot represents this data?

