

Name \_\_\_\_\_  
Date \_\_\_\_\_ Section \_\_\_\_\_  
Summer 2021 Work  
Rising 7<sup>th</sup> Graders

1. Jenny is in charge of ordering T-shirts for the math club at her school. If she paid \$300 for 20 T-shirts, which of the following statements is true?

- A. Jenny paid \$300 for 20 T-shirts, which is a rate of \$20 per T-shirt.
- B. Jenny paid \$300 for 20 T-shirts, which is a rate of \$15 per T-shirt.
- C. Jenny paid \$300 for 20 T-shirts, which is a rate of \$280 per T-shirt.
- D. Jenny paid \$300 for 20 T-shirts, which is a rate of \$35 per T-shirt.

2. There are 36 students in the 6th grade at Garden Valley Middle School. Nine of them have freckles. What is the ratio of 6th graders with freckles to the total number of 6th graders?

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

3. Kate recorded the length of her last six workouts.

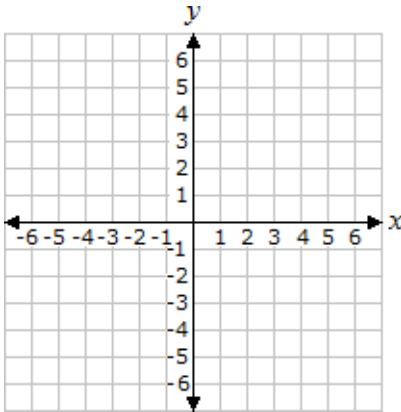
Workout	Length (minutes)
1	49
2	21
3	30
4	52
5	44
6	21

What is the median of the lengths of Kate's workouts?  
(Round, if necessary.)

- A. 21 minutes
- B. 36.17 minutes

- C. 3 minutes
- D. 37 minutes

4.



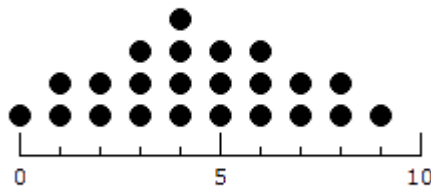
Plot and connect the points  $A(-1, 1)$ ,  $B(2, -3)$ ,  $C(-4, -3)$ , and find the area of the triangle formed.

$$A = \frac{1}{2} \cdot b \cdot h$$

- A. 10 square units
- B. 24 square units
- C. 9 square units
- D. 12 square units

5. Julia recorded the number of trips each of his classmates made to fast food restaurants last week in the dot plot below.

### Classmates' Trips to Fast Food Restaurants



Number of Trips to a Fast Food Restaurant

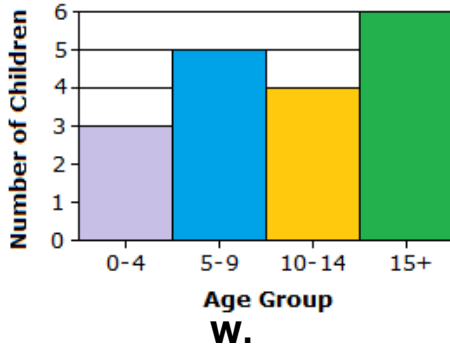
Which of the following would be the best measure of center?

- A. mean
- B. interquartile range
- C. median
- D. mean absolute deviation

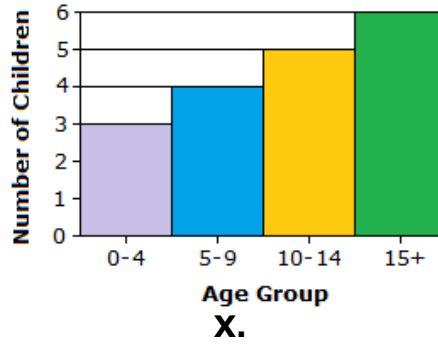
6. The table below shows the number of kids that live on Trey's street and their ages. Which histogram matches the table?

Ages	0-4	5-9	10-14	15+
Number of Students	3	5	4	6

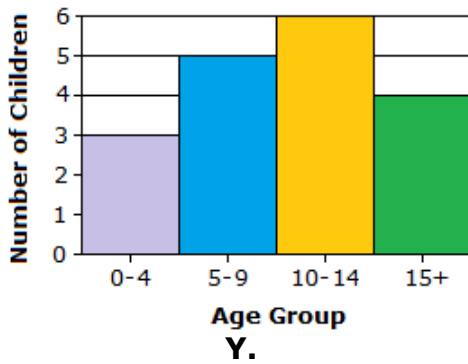
Children on Trey's Street



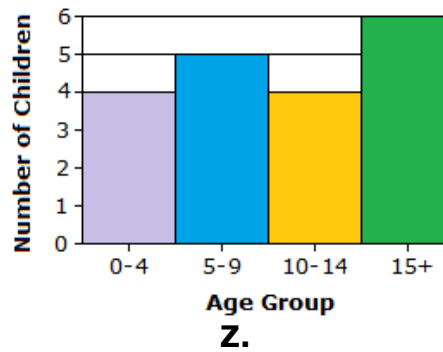
Children on Trey's Street



Children on Trey's Street



Children on Trey's Street



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

7. From the set {72, 19, 13}, use substitution to determine which value of  $x$  makes the equation true.

$$6x = 78$$

- A. 13
- B. 72

- C. 19
- D. none of these

8. Greg is running a marathon. While running, he should drink 22 ounces of water per hour. If he runs for 4 hours, how much water should he drink?

- A. 30 ounces
- B. 26 ounces
- C. 92 ounces
- D. 88 ounces

9. What is the value of the expression below when  $x$  equals 4?

$$15 + 11x$$

- A. 59
- B. 30
- C. 26
- D. 44

10. Which of the following is equivalent to the expression below?

$$10^4$$

- A. 1,000,000
- B. 1,000
- C. 100,000
- D. 10,000

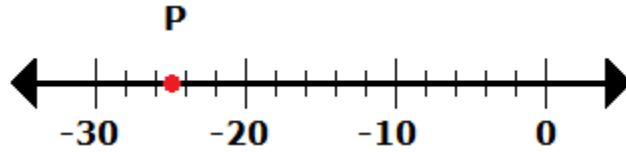
11.

$$30x - 10$$

Which of the following expressions is equivalent to the one above?

- A.  $10(3x - 1)$
- B.  $10x(3 - 1)$
- C.  $20x$
- D.  $40x$

12. Point P is shown on the number line below. Which of the following values is best represented by point P?



- A. -28
- B. -18
- C. -25
- D. -22

13. What symbol goes in the circle below?

$$-13 \bigcirc -12$$

- A. >
- B. =
- C. <

14. A police officer recorded the speeds of the first six cars whose drivers he ticketed for speeding today.

Car	Speed (miles per hour)
1	68
2	75
3	85
4	80
5	75
6	82

What is the mean of the cars' speeds?

- A. 76 miles per hour
- B. 78 miles per hour
- C. 72 miles per hour
- D. 77.5 miles per hour

15. Solve.

$$3.46 \times 3.92$$

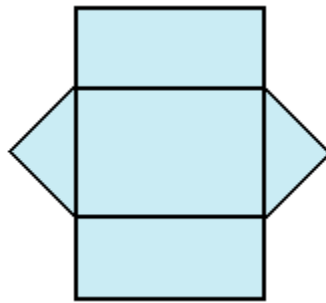
- A. 10.38
- B. 15.3664

- C. 7.38
- D. 13.5632

16. What is the greatest common factor (GCF) of 24 and 36?

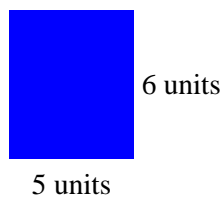
- A. 12
- B. 3
- C. 6
- D. 18

17. What three-dimensional object can be made by folding the net below?



- A. square pyramid
- B. rectangular prism
- C. triangular pyramid
- D. triangular prism

18.

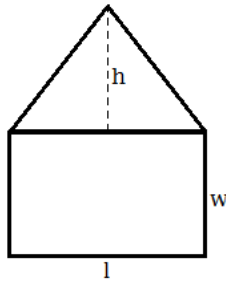


What is the area of the rectangle above?

$$A = l \cdot w$$

- A. 22 square units
- B. 30 square units
- C. 11 square units
- D. 35 square units

19.

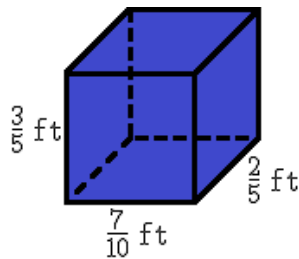


*Note: Figure is not drawn to scale.*

If  $h = 20$  inches,  $l = 29$  inches, and  $w = 16$  inches, what is the area of the figure shown above?

- A. 335 square inches
- B. 754 square inches
- C. 740 square inches
- D. 1,044 square inches

20.



*Note: Figure is not drawn to scale.*

What is the volume of the rectangular prism shown above?

$$V = l \cdot w \cdot h$$

- A.  $\frac{18}{25}$  cubic feet
- B.  $\frac{14}{125}$  cubic feet
- C.  $\frac{21}{125}$  cubic feet
- D.  $\frac{63}{250}$  cubic feet

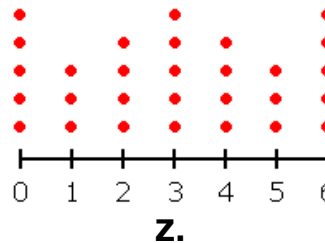
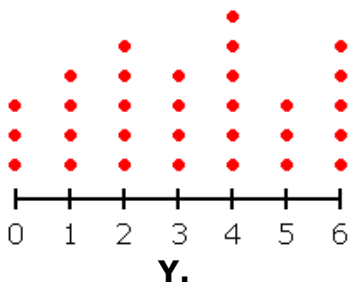
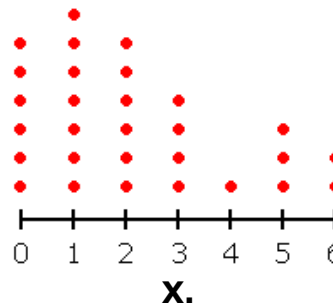
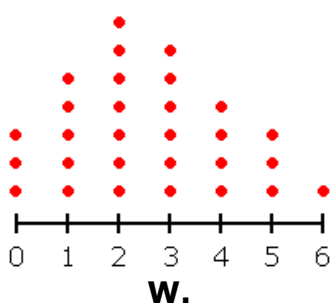
21. Priscilla can make 3 bracelets in 18 minutes. At this rate, how many bracelets can she make in 36 minutes?

- A. 4
- B. 8
- C. 6
- D. 21

22. Of the students at Milton Middle School, 170 are girls. If 50% of the students are girls, how many total students are there at Milton Middle school?

- A. 170
- B. 425
- C. 340
- D. 255

23. Which of the following dot plots shows data that is symmetrical?



- A. X
- B. W
- C. Z



D. Y

24. What is the distance between the points  $(-1, 7)$  and  $(9, 7)$  in the coordinate plane?

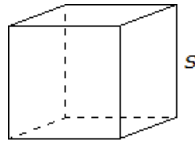
A. 10

B. 7

C. 15

D. 8

25.



If  $s = 5$  feet, then what is the surface area of the cube shown above?

$$SA = 6 \cdot s^2$$

A. 750 square feet

B. 100 square feet

C. 150 square feet

D. 30 square feet

26. Olivia ate 4 times as many nachos as Reagan. If Reagan ate  $r$  nachos, which equation can be used to find the number of nachos Olivia ate,  $v$ ?

A.  $r + 4 = v$

B.  $4r = v$

C.  $4v = r$

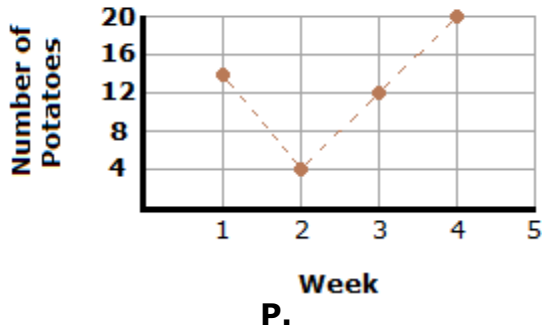
D.  $v + 4 = r$

27. The table below shows how many potatoes Ramona has in her pantry.

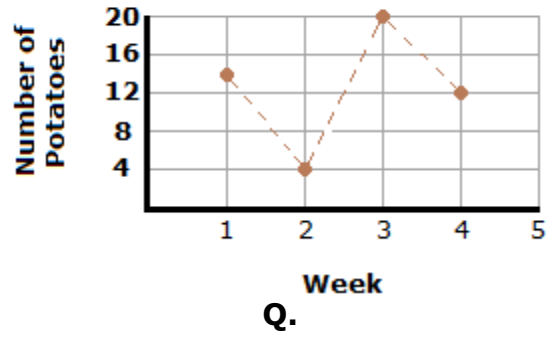
Week	Potatoes in the Pantry
1	14
2	4
3	20
4	12

Which of the following graphs matches the table above?

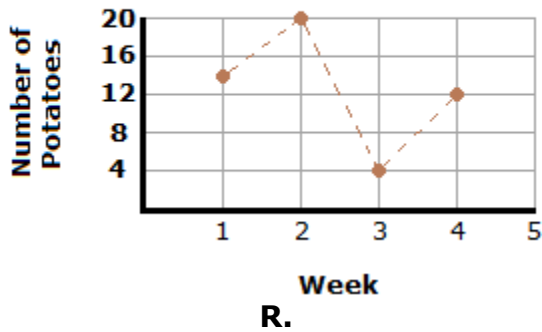
**Potatoes in Ramona's Pantry**



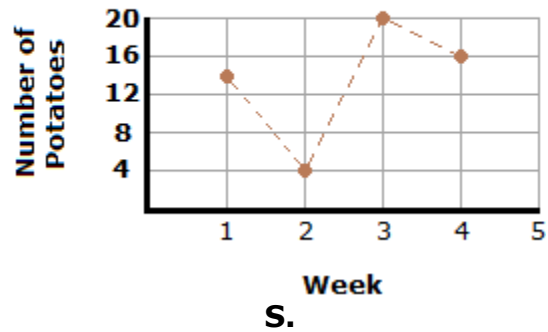
**Potatoes in Ramona's Pantry**



**Potatoes in Ramona's Pantry**



**Potatoes in Ramona's Pantry**



- A. S
- B. P
- C. Q
- D. R

28.

Car	Miles	Gallons
W	102	6
X	66	3
Y	186	6
Z	308	11

Which car has the highest miles per gallon?

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

29. How many  $\frac{1}{4}$ -foot pieces of ribbon can be cut from a roll of ribbon that is 6 feet long?

- A. 24
- B. 12
- C. 26
- D. 13

30. Hillary is sharing a box of candy with her friends. If there are  $b$  pieces of candy in the box being split between 4 people, which expression shows how many pieces of candy each person should get?

- A.  $b + 4$
- B.  $b \times 4$
- C.  $b \div 4$
- D.  $b - 4$