

Spring 2025

GRADE 6
MATHEMATICS

PTM0613_7.5

1. What is $|-7.5|$?

Enter your answer in the space.

PTM0605_P_4

2. Pavlova is a popular dessert in Australia. A manager at a restaurant wants to keep at least 25 servings of pavlova available for customers to order. Which inequality represents the number of servings of pavlova, p , available at the restaurant?

A. $p < 25$

B. $p \leq 25$

C. $p > 25$

D. $p \geq 25$

PTM0621_4,5,2

3. Which of the following questions are examples of statistical questions?

Select **all** the correct answers.

A. How tall is the Empire State Building?

B. What is your age?

C. What is the capital of Arkansas?

D. How many times have you been to the beach?

E. How much money do you earn each week?

M18_A288_44

4. An expression is shown.

$$3x^2 + 10y + 5z + 7$$

Evaluate the expression for $x = 3$, $y = 0$, and $z = 2$.

Enter your answer in the box.

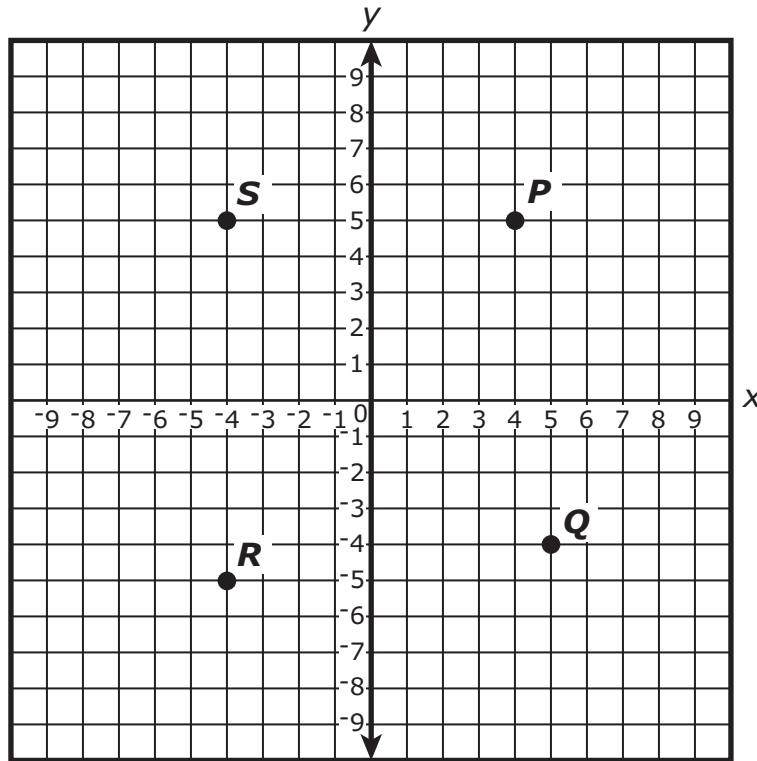
PTM0626_4

5. When plotting the point $(-4, 2)$ on the coordinate plane, the x -coordinate indicates that the point is how many units to the left of the origin?

Enter your answer in the box.

M18_B035_4

6. Four points are shown on the coordinate grid.



Which point is located at $(-4, 5)$?

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

PTM0608_2

7. A rectangular plaque honoring war veterans is $\frac{3}{4}$ meter long and has an area of $\frac{1}{2}$ square meter. What is the width of the plaque?
- A. $\frac{3}{8}$ m
 - B. $\frac{2}{3}$ m
 - C. $\frac{3}{2}$ m
 - D. $\frac{5}{4}$ m

PTM0602_4

8. Which expression is equivalent to $5(x - 7)$?
- A. $5x - 7$
 - B. $x - 35$
 - C. $5x + 35$
 - D. $5x - 35$

PTM0611_22

9. What is the quotient?

$$11.88 \div 0.54$$

Enter your answer in the space.

Mathematics

PTM0612_5

- 10.** What is the greatest common factor of 10 and 75?

Enter your answer in the space.

PTM0601_214

- 11.** Evaluate the expression $7(x - 2)^3 + x^2$ when $x = 5$.

Enter your answer in the space.

PTM0610_215

- 12.** What is the quotient?

$$4,945 \div 23$$

Enter your answer in the space.

PTM0614_P_1

- 13.** Which point is a distance of 5 units away from (1, 3) and in Quadrant II?

A. (-4, 3)

B. (1, -2)

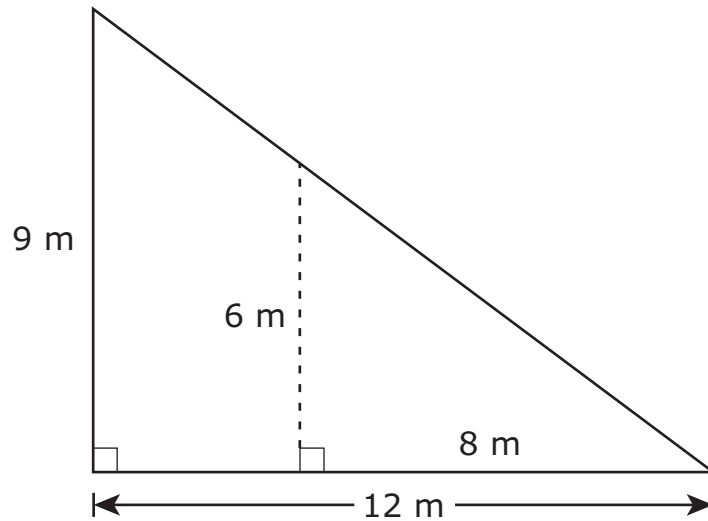
C. (1, 8)

D. (6, 3)

PTM0624_24:30

14. This question has two parts.

A vegetable garden is in the shape of a right triangle with legs measuring 12 meters and 9 meters. A farmer wants to divide the garden into two sections by installing a fence, as shown in the diagram.



The farmer will plant carrots in the triangular section of the garden and squash in the other section.

Part A

What is the area, in square meters, of the section of the garden where carrots will be planted?

Enter your answer in the space.

Part B

What is the area, in square meters, of the section of the garden where squash will be planted?

Enter your answer in the space.

PTM0604_3,2,1

15. Which values make the inequality $2y + 3 > 3y$ true?

Select **all** the correct answers.

A. $y = 0$

B. $y = 1$

C. $y = 2$

D. $y = 3$

E. $y = 4$

PTM0618

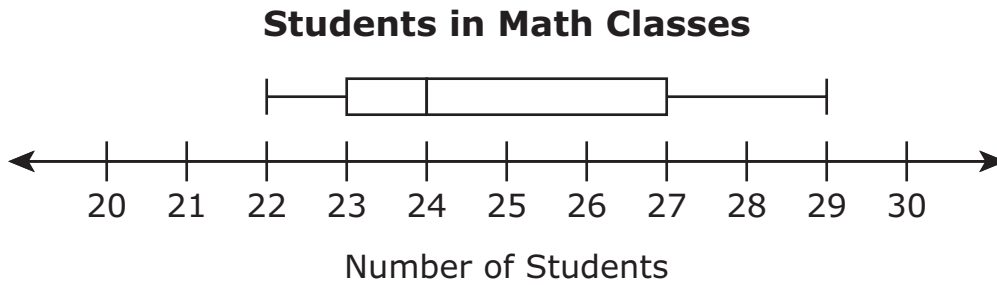
16. Maya is hiking along a trail. She has hiked 4 miles in 2 hours. She has 5 more miles to hike to complete the trail. Maya continues to hike at the same rate.

- Explain how to determine Maya's hiking rate.
- How many total hours will it take Maya to complete the trail?
- Explain how you can use reasoned estimates to check your work.

Enter your answer in the space provided. Show all your work to support your answer.

6M23_074_2

17. A principal recorded the number of students in each math class in the school. The box plot shown summarizes the data.

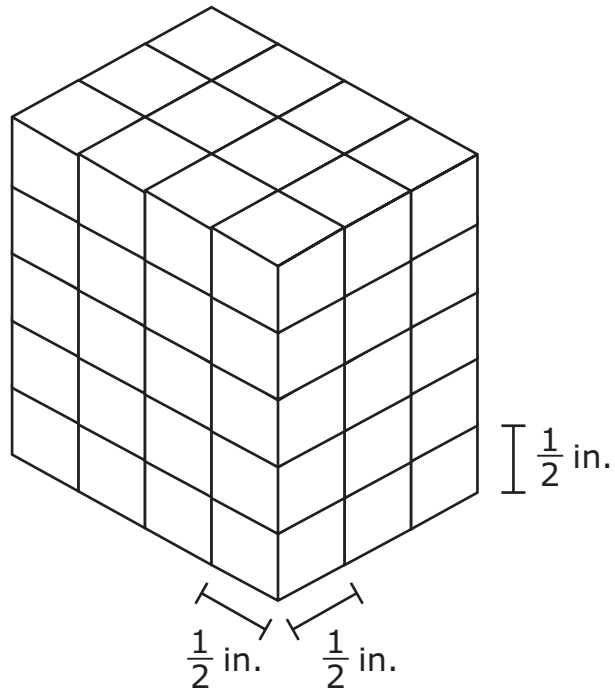


Based on the box plot, what is the median number of students in a math class in the principal's school?

- A. 23
- B. 24
- C. 25
- D. 27

PTM0607_7.5

18. How many cubic inches is the volume of the rectangular prism shown? Express your answer as a decimal.

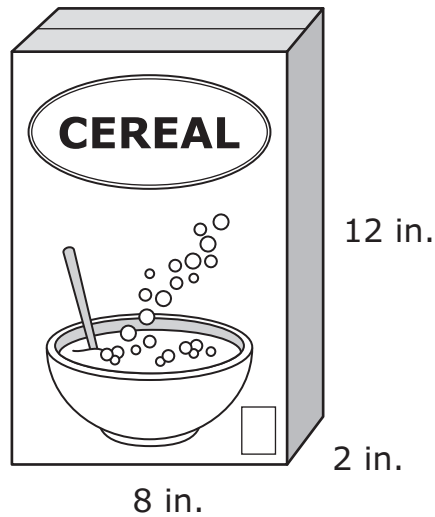


Enter your answer in the space.

PTM0622_:

19. This question has two parts.

A box of cereal with the dimensions shown is being shipped. It costs \$5.76 to ship the box of cereal. The box of cereal contains 6 cups of cereal.



Part A

A customer wants to know the cost for shipping each cubic inch of the box of cereal.

- Write an expression to find the volume of the box of cereal in cubic inches.
- What is the volume of the box of cereal?
- What is the cost for shipping each cubic inch of the box of cereal? Show your work.

Enter your answers in the space provided. Show all your work to support your answers.

Part B

A customer wants to know how many $\frac{1}{4}$ -cup servings of cereal there are in the box of cereal.

- Write an expression to find the number of $\frac{1}{4}$ -cup servings of cereal that are in the box of cereal.
- Use a model to find the number of $\frac{1}{4}$ -cup servings of cereal that are in the box of cereal. Show your work.
- How can you use the relationship between multiplication and division to find the number of $\frac{1}{4}$ -cup servings of cereal that are in the box of cereal?

Enter your answers in the space provided. Show all your work to support your answers.

PTM0603

20. Consider the expressions $-2(x - 5)$ and $10 - 2x$.

- What is the value of the expression $-2(x - 5)$ when $x = 3$?
- What is the value of the expression $10 - 2x$ when $x = 3$?
- Are the expressions $-2(x - 5)$ and $10 - 2x$ equivalent? How do you know?

Enter your answers in the space provided. Show all your work to support your answers.

PTM0627

- 21.** Samantha can bike at a constant rate of 12 miles per hour. Samantha's friend, Jake, can bike at a constant rate of 10 miles per hour.

Both Samantha and Jake start biking from the same point and at the same time. How much farther will Samantha have biked than Jake after 4 hours? Show your work or explain how you determined your answer.

Enter your answer in the space provided. Show all your work to support your answer.

PTM0609

- 22.** Jamie has $\frac{1}{2}$ cup of raisins. The diagram shows the amount of raisins Jamie has.



Jamie wants to know how many $\frac{1}{8}$ -cup servings of raisins she has.

- Write an expression to find the number of $\frac{1}{8}$ -cup servings of raisins that are in $\frac{1}{2}$ cup of raisins.
- How can the diagram representing $\frac{1}{2}$ cup of raisins be modified to show how many $\frac{1}{8}$ -cup servings of raisins are in $\frac{1}{2}$ cup of raisins?
- How many $\frac{1}{8}$ -cup servings of raisins are in $\frac{1}{2}$ cup of raisins? Explain using the relationship between multiplication and division.

Enter your answers in the space provided. Show all your work to support your answer.

PTM0620_P_2

23. Which table shows the correct conversions from pints and quarts to cups?

A.

Original Measurement	Number of Cups
2 pints	4
2 quarts	4

B.

Original Measurement	Number of Cups
2 pints	4
2 quarts	8

C.

Original Measurement	Number of Cups
2 pints	8
2 quarts	4

D.

Original Measurement	Number of Cups
2 pints	8
2 quarts	8

Mathematics

M18_A578_2

- 24.** An electronics store advertises 25% off the regular price of any stereo. What is the amount of the discount on a \$300 stereo?
- A.** \$25
 - B.** \$75
 - C.** \$225
 - D.** \$275

PTM0619_8

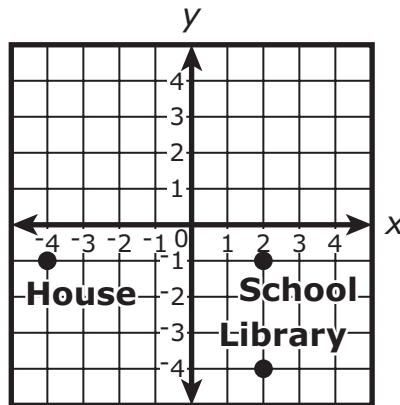
- 25.** Amari was making a banner for a Juneteenth parade. She placed a hook 25% of the way across the banner from left to right. The hook was 2 feet from the left side of the banner. What is the length, in feet, of Amari's banner?

Enter your answer in the box.

PTM0615_:

26. This question has two parts.

The map shows some locations in Paige's town. Each unit represents 1 mile.



Part A

Paige wants to know how far her house is from the school.

- Explain how to determine the distance from Paige's house to the school using absolute value.
- What is the distance from Paige's house to the school?

Enter your answer in the space provided. Show all your work to support your answer.

Part B

Paige wants to know how far the school is from the library.

- Explain how to determine the distance from the school to the library using absolute value.
- What is the distance from the school to the library?

Enter your answer in the space provided. Show all your work to support your answer.



Please let your teacher know that you have completed your test.



