

Math  
Spring 2021  
Grade 6  
Released Items

1.

M600336

Which expression shows  $48 + 66$  rewritten as the greatest common factor multiplied by the sum of two numbers?

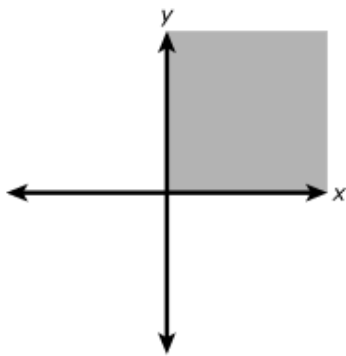
- A.  $3(16 + 22)$
- B.  $3(45 + 63)$
- C.  $6(8 + 11)$
- D.  $6(42 + 60)$

2.

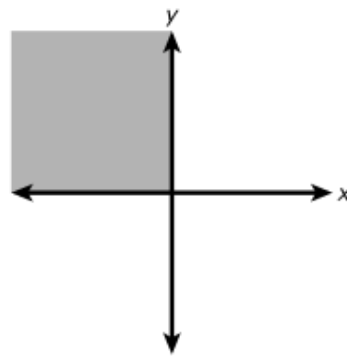
M600339

Point G has a negative  $x$ -coordinate and a positive  $y$ -coordinate. Which shaded quadrant contains the location of point G?

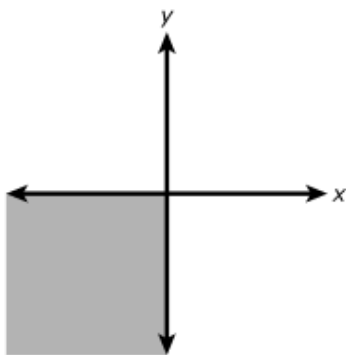
A.



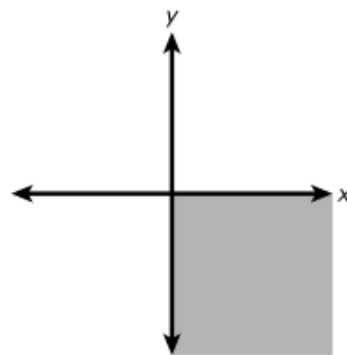
B.



C.



D.



**3.**

**M25404**

A student reads 144 pages of a book in 4 hours. What is the average rate the student reads, in pages per hour?

Enter your answer in the box.

**4.**

**M600435**

Which question is a statistical question?

- A. How many days are in November?
- B. How many students have band fifth period?
- C. How many inches tall is the flagpole at the school?
- D. How many minutes do students wait in line in the cafeteria?

**5.**

**M600013**

Which value of  $p$  makes this equation true?

$$0.4p + 3 = 9$$

- A. 2
- B. 3
- C. 12
- D. 15

6.

5064-M25389

A student states that this expanded form can be used to write the number 604.29.

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right)$$

**Part A**

The student's expression is incorrect.

- Identify the error or errors in the student's expression.
- Correctly write 604.29 in expanded form.

Enter your answers in the space provided.



▼ Math symbols

+	-	×	÷
±	-	·	/
=	≠	$\frac{\square}{\square}$	$\frac{\square}{\square}$
$y^x$	$\sqrt{\quad}$	$\sqrt[3]{\quad}$	$x_i$
$\pi$	(	)	°
x			

► Relations

**(Continues on next page)**

**6. (Continued from previous page)****5064-M25389****Part B**

Another student subtracts the number represented by

$$(3 \times 10) + (8 \times 1) + \left(6 \times \frac{1}{10}\right) + \left(1 \times \frac{1}{100}\right) \text{ from}$$

$$(6 \times 100) + (4 \times 10) + (2 \times 1) + \left(9 \times \frac{1}{10}\right) \text{ to obtain } 604.29.$$

- Explain whether or not the second student's subtraction is correct.
- If the student's difference is incorrect, then what is the correct difference?
- Round the correct difference to the nearest tenth.

Enter your explanation and your answer(s) in the space provided.



▼ Math symbols

+	-	×	÷
±	-	·	/
=	≠	≡	≡
$y^x$	$\sqrt{\quad}$	$\sqrt[3]{\quad}$	$x_i$
$\pi$	(	)	°
x			

► Relations

**7.****VH238413**

The population of a town was 6,000 people last year. The population is expected to increase by 4% this year. By how many people is the population expected to increase this year?

- A. 15
- B. 240
- C. 1,500
- D. 2,400

8.

VH139064

When a person puts a quarter in a parking meter, the person can park a car for 15 minutes. The amount of time a person can park is proportional to the amount of money put in the parking meter.

Rita put coins in the parking meter to park for 1 hour and 24 minutes.

What amount of money is required to park for exactly 1 hour and 24 minutes? Show or explain the steps you used to determine the answer.

Enter your answer and your work or explanation in the space provided.



▼ Math symbols

+	-	×	÷
±	-	·	/
=	≠	≡	≡
$y^x$	$\sqrt{\quad}$	$\sqrt[3]{\quad}$	$x_i$
$\pi$	(	)	°
$\cdot$			

► Relations

9.

M600010

What is the value of this expression when  $x = 4$ ?

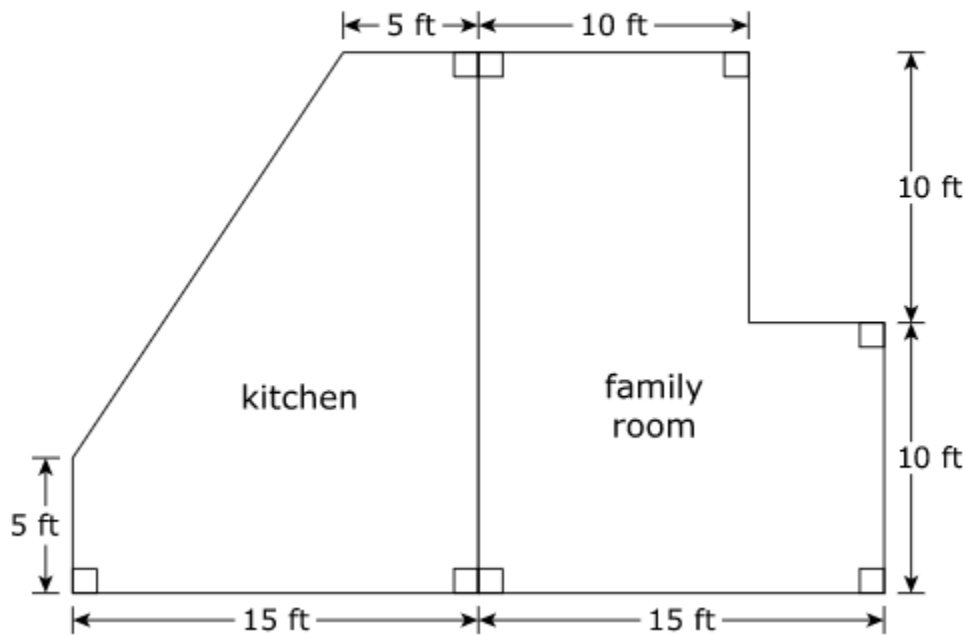
$$8\left(\frac{x+3}{4}\right)$$

Enter your answer in the box.

10.

5151-M25906

A homeowner created this diagram showing the dimensions of the kitchen and the family room in his house.



**Part A**

What is the area, in square feet, of the kitchen?

Enter your answer in the box.

**Part B**

The homeowner buys a total of 450 square feet of carpet. He covers the floor of the family room in carpet. How many square feet of carpet are left over?

- A. 100
- B. 150
- C. 200
- D. 250