

Sample Items

Grade 6

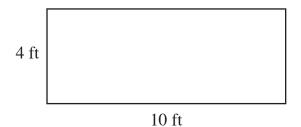
MATHEMATICS



Original CRCT

Grade 6 Items MATHEMATICS

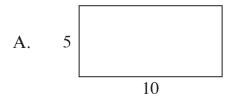
1. Which of these shows the correct area and perimeter of this rectangle?



- A. Area = 40 ft Perimeter = 28 ft
- B. Area = 40 ft Perimeter = 28 ft²
- C. Area = 40 ft^2 Perimeter = 28 ft^2
- * D. Area = 40 ft² Perimeter = 28 ft
- 2. Which of these numbers is NOT a multiple of 5?
 - A. 10
 - B. 15
 - * C. 28
 - D. 30

3. Look at the rectangle.

Which of these rectangles is similar to the rectangle above?



* B.	5	
		15

C.	5		
		5	

D.	7.5	
		15

4. Which of these rules describes the pattern in the table?

X	У
1	3
2	5
3	7
4	9
5	11

* A.
$$y = 2x + 1$$

B.
$$y = 3x$$

C.
$$x = y - 3$$

D.
$$x = \frac{1}{2}y$$

5. Solve for x.

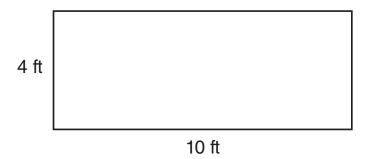
$$6x = 72$$

- A. 9
- B. 10
- C. 11
- * D. 12



Grade 6 Items MATHEMATICS

1. Which of these shows the correct **area** and **perimeter** of this rectangle?



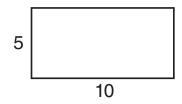
- A. Area = 40 ft Perimeter = 28 ft
- B. Area = 40 ftPerimeter = 28 ft^2
- C. Area = 40 ft^2 Perimeter = 28 ft^2
- D. Area = 40 ft^2 Perimeter = 28 ft

Remember

Think about the difference between area and perimeter.

- 2. Which of these numbers is NOT a multiple of 5?
 - A. 10
 - B. 15
 - C. 28
 - D. 30

3. Look at the rectangle.



Which of these rectangles is similar to the rectangle above?

A. 5

15

Helpful Hint

Use a proportion to solve.

B. 10

C. 4

D. 10

4. Which of these rules describes the pattern in the table?

Х	у
1	3
2	5
3	7
4	9
5	11

A.
$$y = 2x + 1$$

B.
$$y = 3x$$

C.
$$x = y - 3$$

$$D. x = \frac{1}{2}y$$

Helpful Hint

Look at the table where you have both an *x* value and a *y* value.

5. Solve for x.

$$6x = 72$$

- A. 9
- B. 10
- C. 11
- D. 12

Helpful Hint

Remember the multiplication property of equality.

Item Sequence	Georgia Performance Standard	KEY
1	Domain: Measurement M6M2. Students will use appropriate units of measure for finding length, perimeter, area, and volume and will express each quantity using the approximate unit. c. Compare and contrast units of measure for perimeter, area, and volume.	D
2	Domain: Number and Operations M6N1. Students will understand the meaning of the four arithmetic operations as related to positive rational numbers and will use these concepts to solve problems. a. Apply factors and multiples.	С
3	Domain: Geometry M6G1. Students will further develop their understanding of plane figures. e. Solve problems involving scale drawings.	В
4	Domain: Algebra M6A2. Students will consider relationships between varying quantities. a. Analyze and describe patterns arising from mathematical rules, tables, and graphs.	A
5	Domain: Algebra M6A3. Students will evaluate algebraic expressions, including those with exponents, and solve simple one-step equations using each of the four basic operations.	D

Item Sequence	Commentary
All	 The font size was increased on all items. Geometric figures and other graphic images were enlarged. The line spacing between items was increased.
1	 The key terms were boldfaced to help the student focus on the concept the item was designed to assess. A thought bubble was added to help the student be mindful of how to solve the problem.
2	No changes have been made.
3	 The key word was boldfaced to highlight and help the student focus on the concept being tested. The lengths of the rectangles have been simplified. A hint box was added to help the student be mindful of how to solve the problem.
4	A hint box was added to help the student be mindful of how to solve the problem.
5	A hint box was added to help the student be mindful of how to solve the problem.