

# Sample Items 

## Grade 6

## MATHEMATICS

## Original CRCT

## Grade 6 Items MATHEMATICS

1. Which of these shows the correct area and perimeter of this rectangle?
$\square$
A. Area $=40 \mathrm{ft}$

Perimeter $=28 \mathrm{ft}$
B. $\operatorname{Area}=40 \mathrm{ft}$

Perimeter $=28 \mathrm{ft}^{2}$
C. $\operatorname{Area}=40 \mathrm{ft}^{2}$

Perimeter $=28 \mathrm{ft}^{2}$

* D. Area $=40 \mathrm{ft}^{2}$

Perimeter $=28 \mathrm{ft}$
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?
A. 5


* B. 5
C. 5

D. 7.5


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

| $x$ | $y$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 5 |
| 3 | 7 |
| 4 | 9 |
| 5 | 11 |

* A. $y=2 x+1$
B. $y=3 x$
C. $x=y-3$
D. $x=\frac{1}{2} y$

5. Solve for $x$.

$$
6 x=72
$$

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 $=40 \mathrm{ft}$

Perimeter $=28 \mathrm{ft}$
B. Area $=40 \mathrm{ft}$

Perimeter $=28 \mathrm{ft}^{2}$
C. Area $=40 \mathrm{ft}^{2}$

Perimeter $=28 \mathrm{ft}^{2}$
D. Area $=40 \mathrm{ft}^{2}$

Perimeter $=28 \mathrm{ft}$

## MATHEMATICS

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

## MATHEMATICS

3. Look at the rectangle.


Which of these rectangles is similar to the rectangle above?
A. 5

15
B. 10

20
C. 4 $\square$
D. 10

## MATHEMATICS

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

| $x$ | $y$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 5 |
| 3 | 7 |
| 4 | 9 |
| 5 | 11 |

A. $y=2 x+1$
B. $y=3 x$
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 $x$.

$$
6 x=72
$$

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 <br> M6M2. Students will use appropriate units of measure for finding length, perimeter, area, and volume and will express each quantity using the approximate unit. <br> c. Compare and contrast units of measure for perimeter, area, and volume. | D |
| 2 | Domain: Number and Operations <br> 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. <br> a. Apply factors and multiples. | C |
| 3 | Domain: Geometry <br> M6G1. Students will further develop their understanding of plane figures. <br> e. Solve problems involving scale drawings. | B |
| 4 | Domain: Algebra <br> M6A2. Students will consider relationships between varying quantities. <br> a. Analyze and describe patterns arising from mathematical rules, tables, and graphs. | A |
| 5 | Domain: Algebra <br> 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. <br> - Geometric figures and other graphic images were enlarged. <br> - The line spacing between items was increased. |
| 1 | - The key terms were boldfaced to help the student focus on the concept <br> the item was designed to assess. <br> - A thought bubble was added to help the student be mindful of how to <br> solve the problem. |
| 2 | No changes have been made. |
| 3 | - The key word was boldfaced to highlight and help the student focus on <br> the concept being tested. <br> - The lengths of the rectangles have been simplified. <br> - A hint box was added to help the student be mindful of how to solve the <br> problem. |
| 4 | A hint box was added to help the student be mindful of how to solve the <br> problem. |
| 5 | A hint box was added to help the student be mindful of how to solve the <br> problem. |

