



New York State Testing Program

Mathematics Test Book 2

Grade **8**

May 5–7, 2010

Name _____



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TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Be sure to read carefully all the directions in the test book.
- Read each question carefully and think about the answer before writing your response.
- Be sure to show your work when asked. You may receive partial credit if you have shown your work.
- Use your calculator to help you solve the problems on this part of the test.

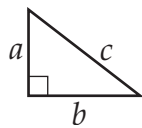


This picture means that you will use your ruler.

Mathematics Reference Sheet

FORMULAS

Pythagorean Theorem



$$c^2 = a^2 + b^2$$

Simple Interest

$$I = prt$$

Distance Formula

$$d = rt$$

CONVERSIONS

Temperature Conversions

$$F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

Measurement Conversions

$$1 \text{ mile} = 5,280 \text{ feet}$$

$$1 \text{ yard} = 3 \text{ feet}$$

28

Rowan raised \$640 in a charity walk last year. This year he raised 15% **more** than he raised last year. How much money did Rowan raise this year?

Show your work.

Answer \$ _____

Go On

29Complete the table below with the missing values for y .

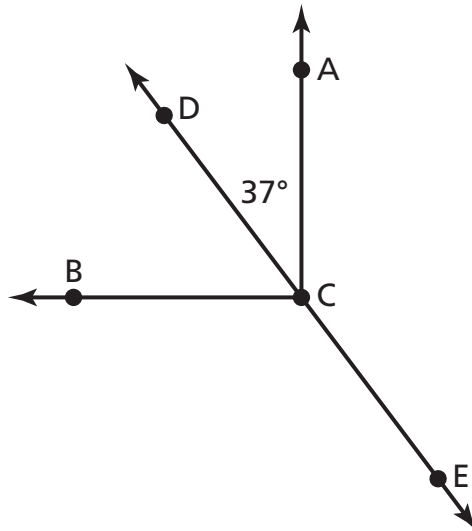
x	y
-1	1
0	4
1	7
2	10
3	
4	

Based on the data in the table, write the equation that represents the relationship between x and y .

Answer $y =$ _____

30

In the diagram below, right angle ACB is intersected by \overleftrightarrow{DE} .



[not drawn to scale]

What are the measures of $\angle DCB$ and $\angle ACE$?

Show your work.

Answer $\angle DCB =$ _____ degrees

$\angle ACE =$ _____ degrees

Go On

31

Bob has a container with a capacity of 12 quarts. He wants to express this capacity in gallons. Write a proportion to find the number of gallons of water Bob's container can hold.

$4 \text{ quarts} = 1 \text{ gallon}$

Proportion _____

Solve the proportion.

Show your work.

Answer _____ gallons

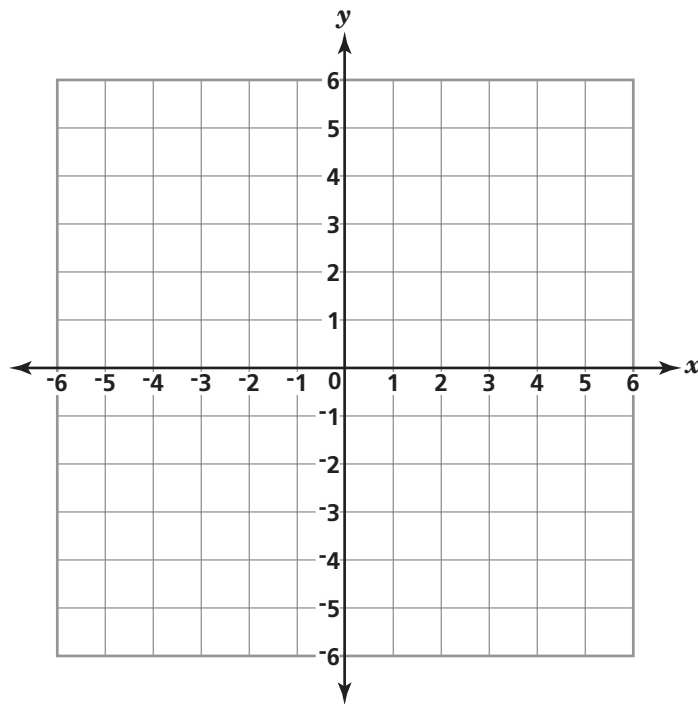
32

Erika is assigned to graph the line of the equation $y = 2x - 3$.

Use Erika's equation to complete the table below for the given values of x .

x	y
-1	
1	
3	

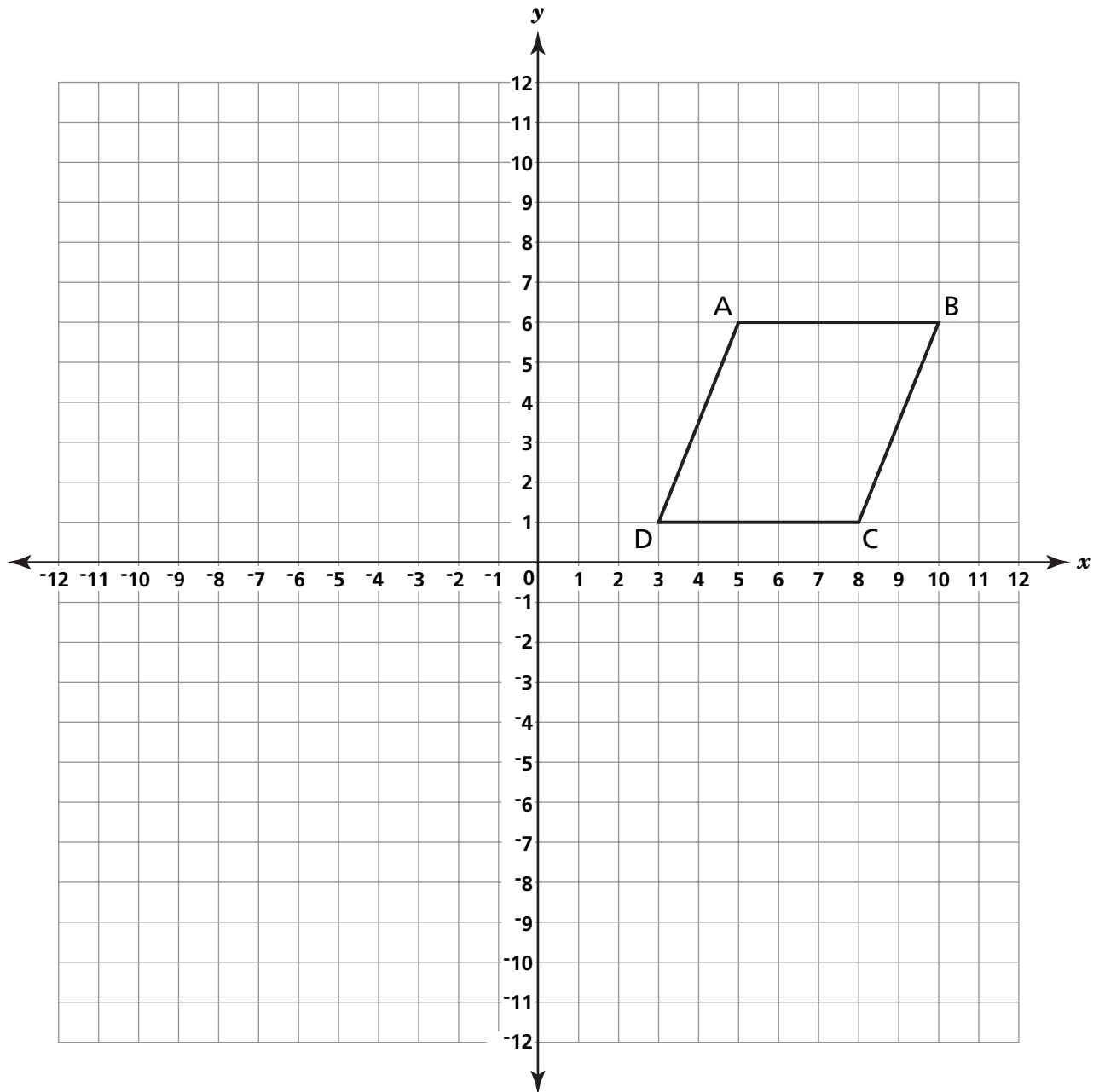
Using the information from the table, graph the line of the equation $y = 2x - 3$ on the coordinate plane below. Be sure to plot all points from the table and draw a line connecting the points.



Go On

33

On the coordinate plane below, draw the image of quadrilateral ABCD reflected over the x -axis. Label the image $A'B'C'D'$.



On the lines below, explain how you determined the location of A'.

STOP

Place Student Label Here



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