



New York State Testing Program

Mathematics Test Book 2

Grade **8**

March 6–12, 2008

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.

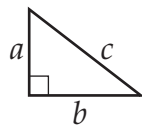


This picture means that you will use your ruler.

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

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

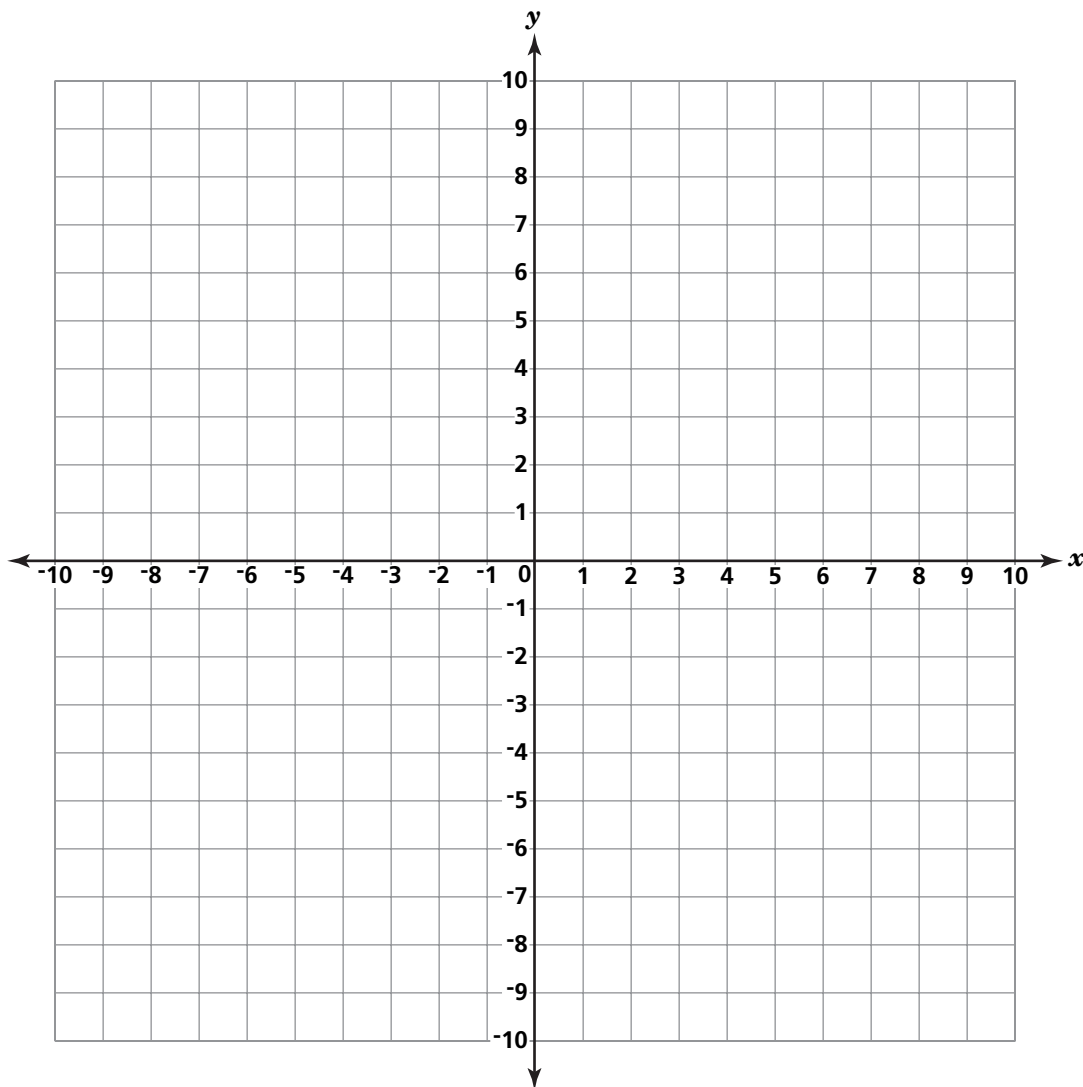
$$1 \text{ yard} = 3 \text{ feet}$$

The table below shows values for x and y when $y = 3x - 2$.

x	-2	-1	0	1	2
y	-8	-5	-2	1	

Complete the table by finding the value of y when $x = 2$.

Plot the ordered pairs shown in the table onto the coordinate plane below. Then draw a line connecting the points.



A point on the line has an x -coordinate of 3. What is its corresponding y -coordinate?

Answer _____

Go On

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Coretta buys a pair of jeans that is on sale for 20% off. The regular price is marked as \$27.00. What is the sale price of the pair of jeans?

Show your work.

Answer \$ _____

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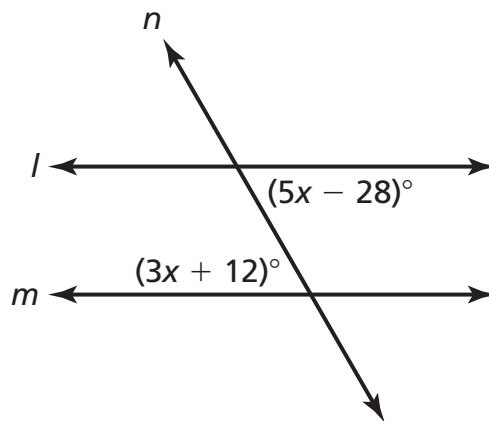
Rita multiplied the monomials $12a^3b^6$ and $3ab^2$ as shown below.

$$(12a^3b^6)(3ab^2) = 36a^4b^8$$

Is Rita's answer correct? On the lines below, explain how you determined your answer.

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In the diagram below, line l and line m are parallel.



[not drawn to scale]

Solve for x .

Show your work.

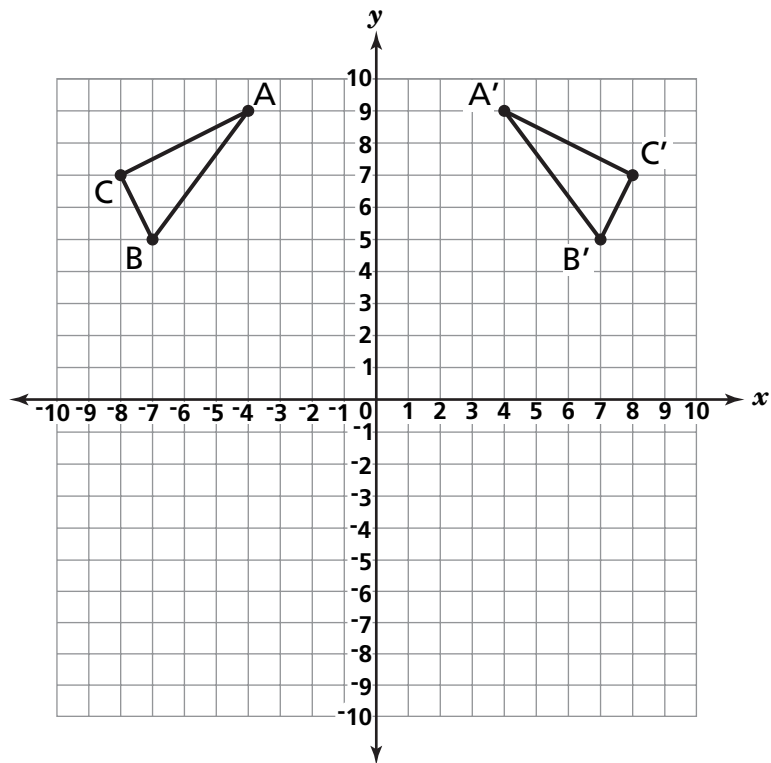
Answer $x =$ _____

What is the measure of the angle represented by $5x - 28$?

Answer _____ degrees

Go On

Triangle ABC and triangle A'B'C' are plotted on the coordinate plane below.



What is the name of the transformation applied to triangle ABC that resulted in triangle A'B'C' ?

Answer _____

On the lines below, describe how the coordinates of point A changed to the coordinates of point A'.

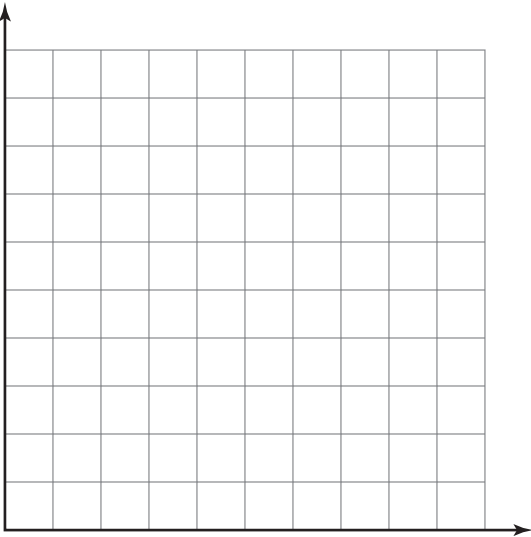
Go On

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A pool is being filled with water. It already contains 100 gallons of water and it continues to be filled at a constant rate. Complete the table below to show the number of gallons of water in the pool after 3 minutes and after 4 minutes.

Time in Minutes (<i>m</i>)	Gallons of Water (<i>g</i>)
0	100
1	120
2	140
3	
4	

Plot the ordered pairs from the table onto the graph paper below. Then draw a line segment connecting the points.



STOP

Place Student Label Here



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