



New York State Testing Program

Mathematics Test Book 2

Grade **8**

March 9–13, 2009

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.

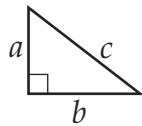


This picture means that you will use your ruler.

Mathematics Reference Sheet

FORMULAS

Pythagorean Theorem



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

Simple Interest

$$I = prt$$

Distance Formula

$$d = rt$$

CONVERSIONS

Temperature Conversions

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

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

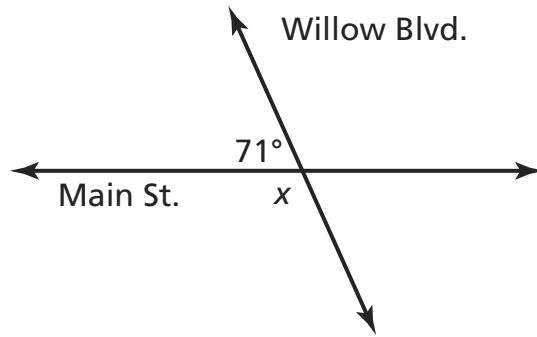
Measurement Conversions

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

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

28

Willow Boulevard intersects Main Street at a 71° angle, as shown in the diagram below.



[not drawn to scale]

What is the measure of $\angle x$?

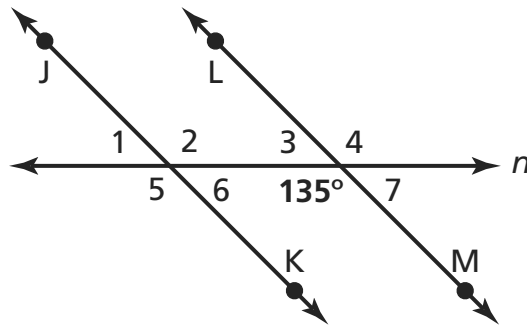
Show your work.

Answer _____ degrees

Go On

29

In the diagram below, \overleftrightarrow{JK} and \overleftrightarrow{LM} are parallel, and line n is a transversal.



[not drawn to scale]

What is the measure of $\angle 1$?

Answer _____ degrees

On the lines below, explain how you determined your answer.

30Complete the table below with the missing values for y .

x	y
-4	14
-3	11
-2	8
-1	5
0	
1	

On the line below, write a function rule that shows the relationship between x and y in the table.

Answer _____

Go On

31

Mustafa buys a book that costs \$12.50. If the sales tax is 8%, what is the total cost of the book?

Show your work.

Answer \$ _____

32Solve the equation below for p .

$$3(p + 6) = 5p + 4$$

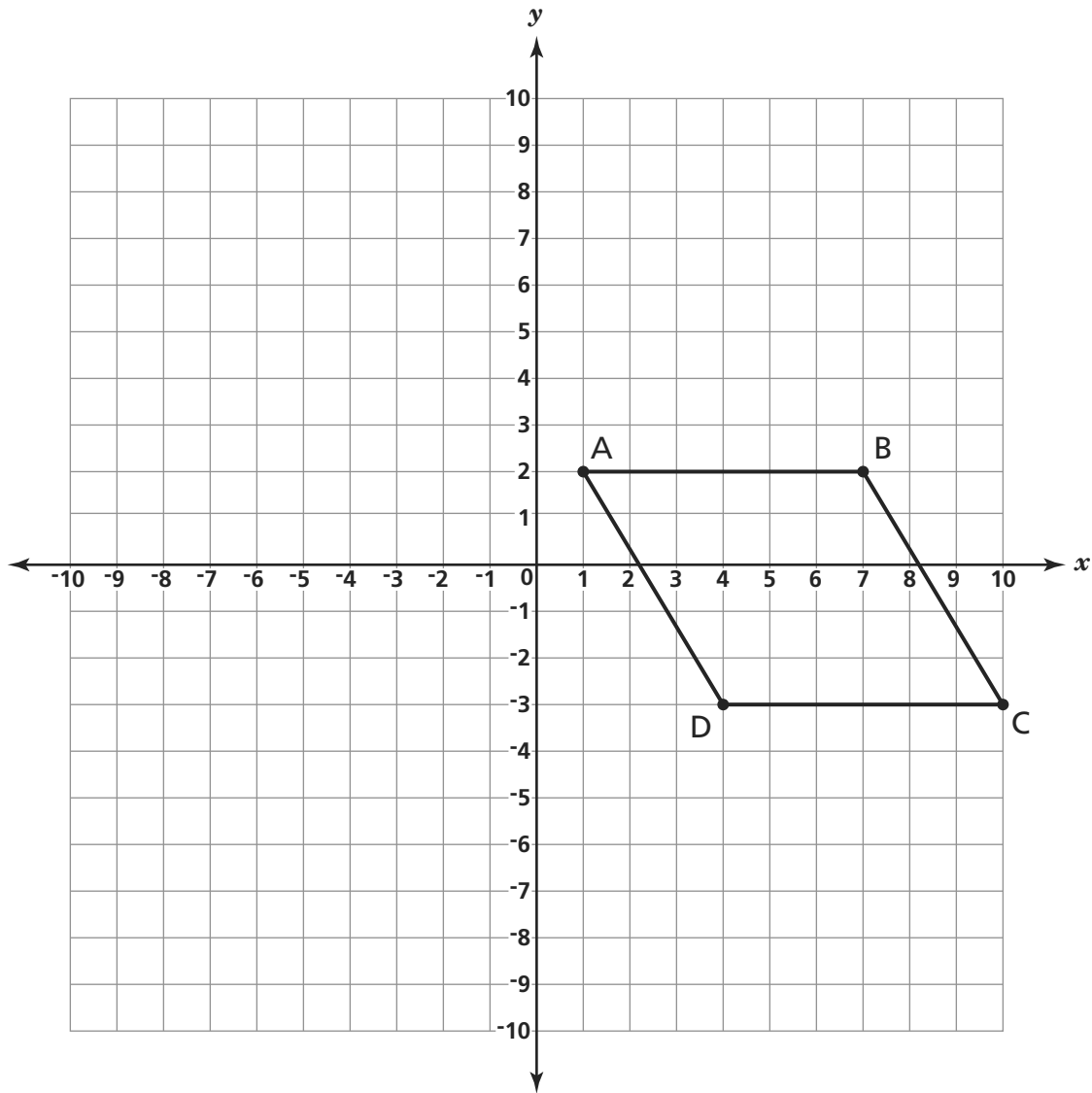
Show your work.**Answer** $p =$ _____

Check your answer.

Show your work.**Go On**

33

Alexis started making a design by drawing figure ABCD. The next figure in her design is the reflection of figure ABCD in the y -axis. On the coordinate plane below, draw the reflection of figure ABCD. Label the image $A'B'C'D'$.



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

STOP

Place Student Label Here



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