Name _____ Date _____

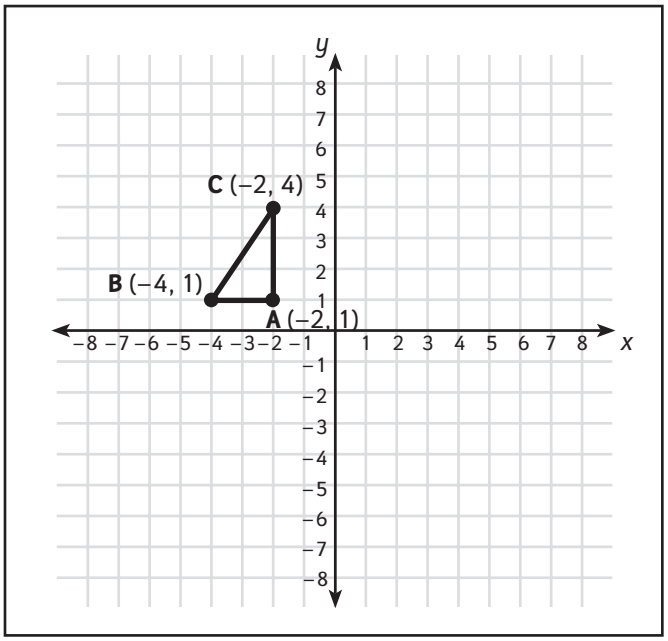
Skills Maintenance

Translations and Reflections

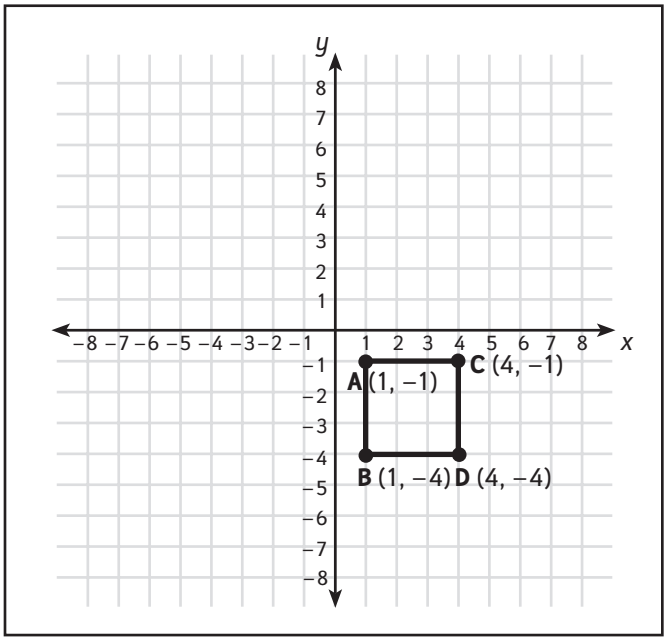
Activity 1

Translate or reflect the shapes and find the coordinates of the vertices of the new shape.

1. Translate the triangle 3 units up. Draw the new triangle and label the coordinates of its vertices.



2. Reflect the square across the *x*-axis. Draw the new square and label the coordinates of its vertices.



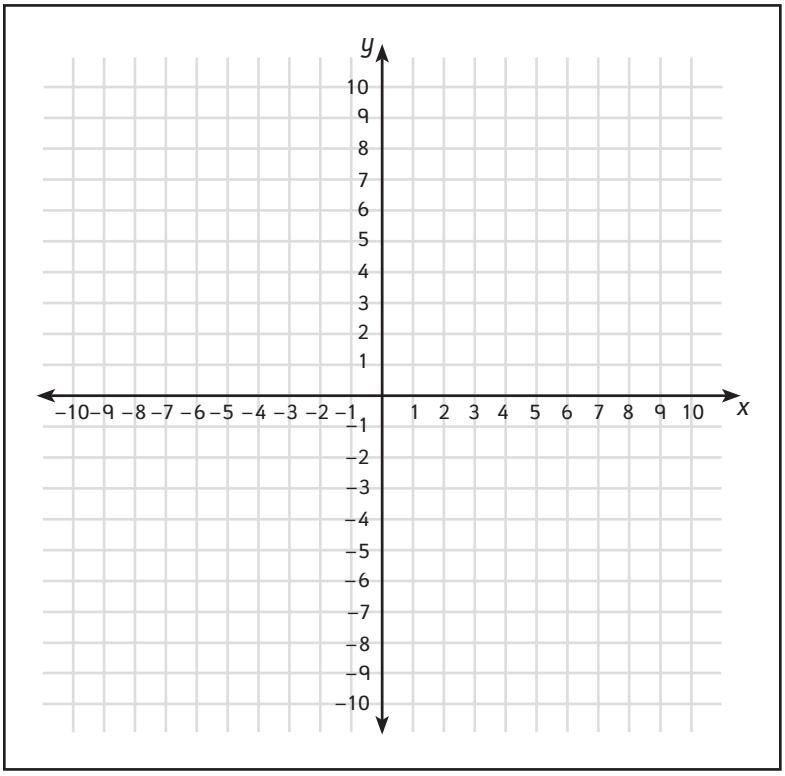
Name _____ Date _____

Apply Skills

Positive and Negative Slopes

Activity 1

Draw a line for each of the functions on the coordinate graph. Use the letters to label the lines.



Line A: $y = 2x$ Line B: $y = -2x$ Line C: $y = 4x$ Line D: $y = -4x$

Activity 2

Write about the lines you drew in Activity 1. Tell about where the lines fall in quadrants. Describe the steepness of the lines.

_____

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Unit 9

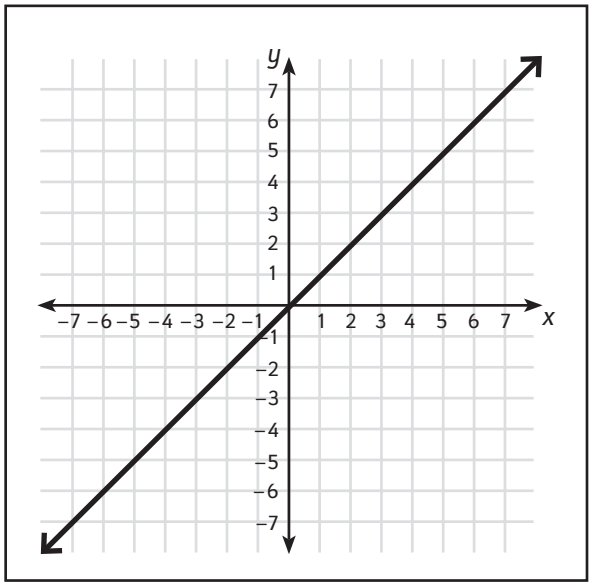
Name _____ Date _____

Problem-Solving Activity

Using Slopes to Analyze Functions

Select the function that matches the graph. Use your knowledge about types of slopes to help you make your decision. Then write a statement explaining how you know this is the function represented by the graph.

1. Which function is represented by this graph?



(a) $y = -x$

(b) $y = x$

(c) $y = 10x$

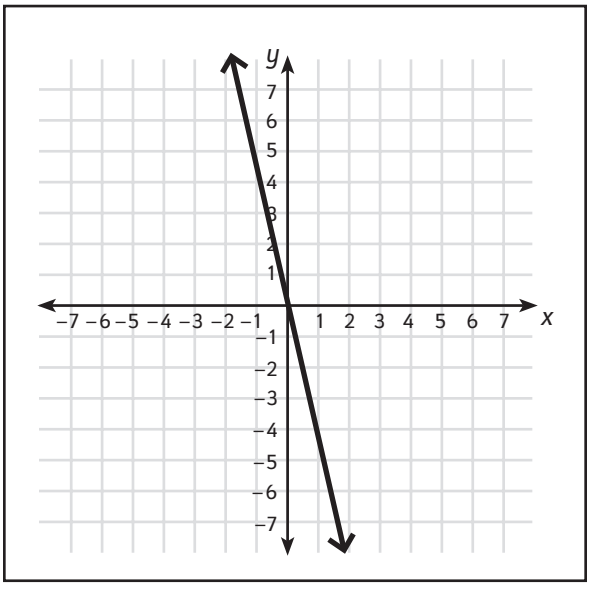
Explain your answer.

_____

_____

_____

2. Which function is represented by this graph?



(a) $y = -\frac{1}{2}x$

(b) $y = 10x$

(c) $y = -10x$

Explain your answer.

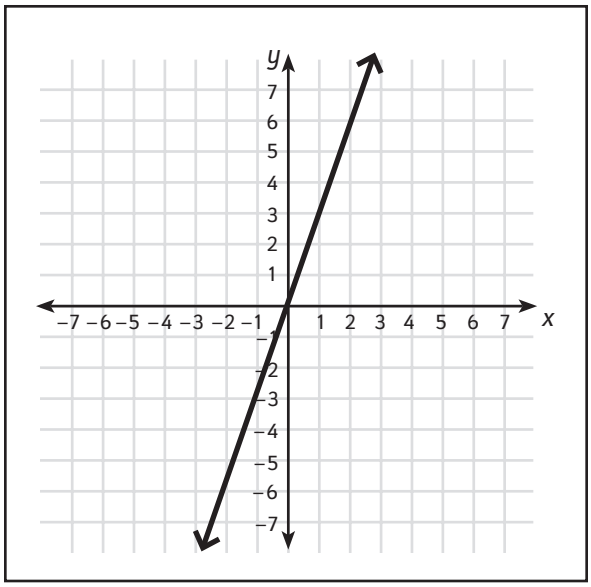
_____

_____

_____

Name _____ Date _____

3. Which function is represented by this graph?



(a) $y = -10x$

(b) $y = x$

(c) $y = 10x$

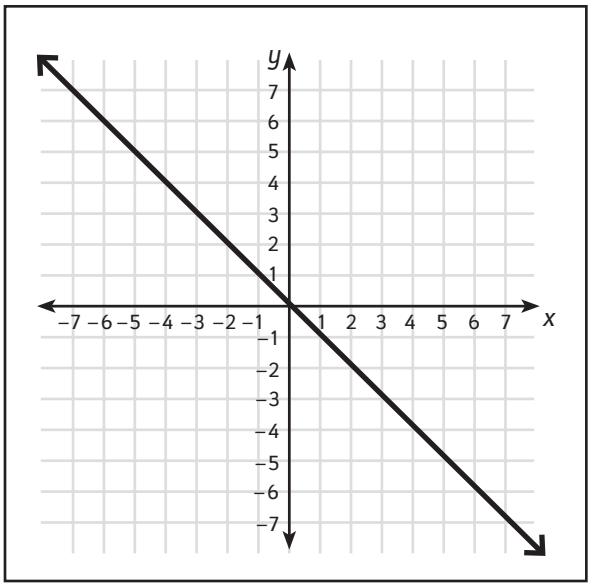
Explain your answer.

_____

_____

_____

4. Which function is represented by this graph?



(a) $y = -x$

(b) $y = x$

(c) $y = -10x$

Explain your answer.

_____

_____

_____

Unit 9

mBook **Reinforce Understanding**
Use the **mBook** ***Study Guide*** to review lesson concepts.