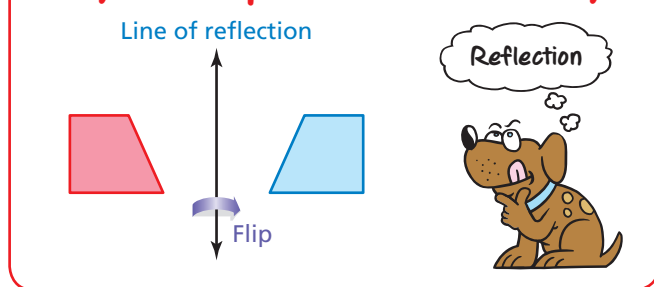
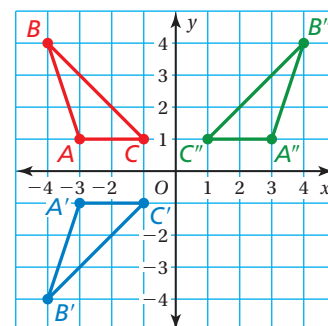


## Key Concept and Vocabulary

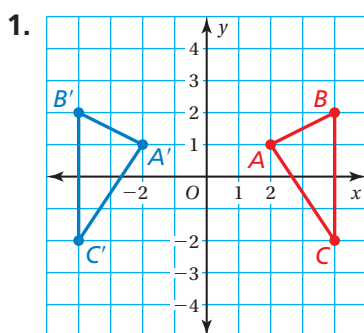


## Visual Model

A reflection creates a mirror image of the original figure.



## Skill Example

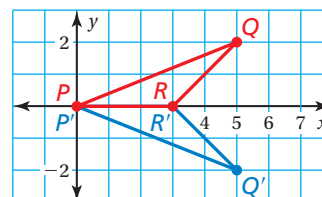


The triangle is reflected in the  $y$ -axis.

The coordinates of the image are  $A'(-2, 1)$ ,  $B'(-4, 2)$ , and  $C'(-4, -2)$ .

## Application Example

2. You design a logo using a triangle with vertices  $P(0, 0)$ ,  $Q(5, 2)$ , and  $R(3, 0)$ . You reflect the figure in the  $x$ -axis to create the design. Draw the design in the coordinate plane.

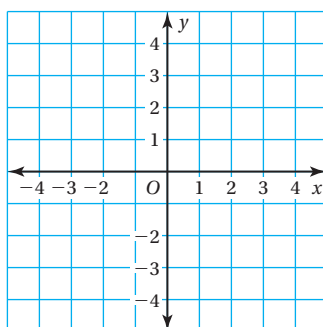


## PRACTICE MAKES PURR-FECT®

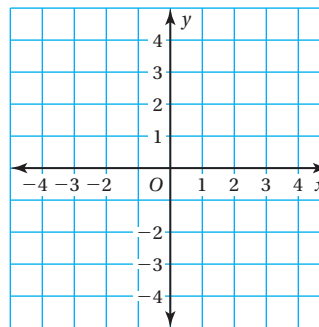
Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

Draw the figure and its reflection in the given axis.

3.  $A(1, 4)$ ,  $B(4, 3)$ ,  $C(2, -3)$ ;  $y$ -axis



4.  $P(-3, 3)$ ,  $Q(4, 3)$ ,  $R(3, 1)$ ,  $S(0, 1)$ ;  $x$ -axis



5. **LOGO** You design a logo using the figure shown. The entire logo is a reflection in both the  $x$ -axis and in the  $y$ -axis. Draw the rest of the logo in the coordinate plane.

