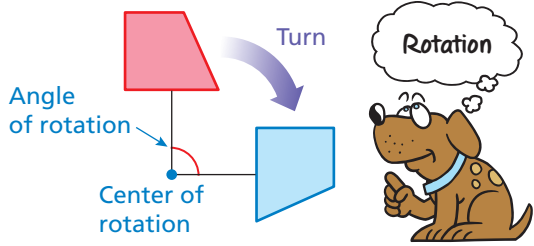


REVIEW: Rotations

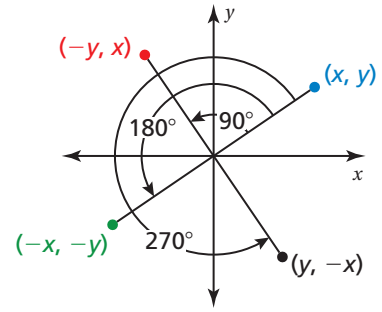
Name _____

Key Concept and Vocabulary

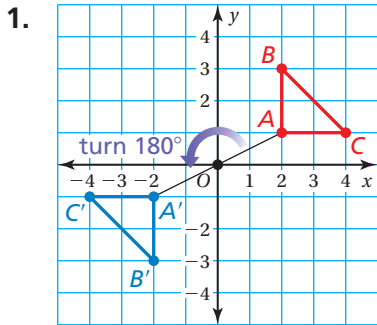


Visual Model

You can use coordinate rules for counterclockwise rotations about the origin.



Skill Example



The coordinates of the image are $A'(-2, -1)$, $B'(-2, -3)$, and $C'(-4, -1)$.



Application Example

- Your location on a carnival ride is represented by the point $(2, 6)$ in a coordinate plane. At the end of the ride, your location has rotated 90° counterclockwise about the origin. What is your new location?

$$(x, y) \longrightarrow (-y, x)$$

$$(2, 6) \longrightarrow (-6, 2)$$

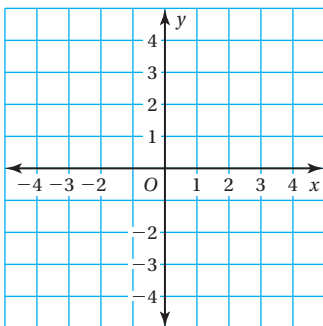
∴ Your new location is at $(-6, 2)$.

PRACTICE MAKES PURR-FECT®

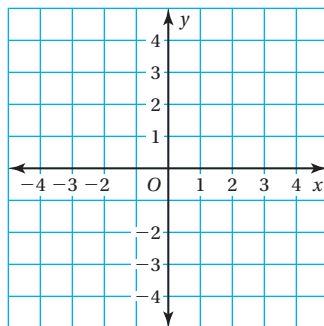
Check your answers at BigIdeasMath.com.

The vertices of a triangle are $A(2, 0)$, $B(3, 1)$, and $C(4, -2)$. Draw the figure and its image after the rotation about the origin.

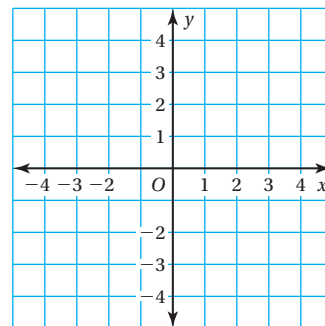
- 270° counterclockwise



- 180°



- 270° clockwise



- SPINNER** A game spinner is shown in the coordinate plane. What coordinates do the spinner point to after a rotation of 90° clockwise about the origin?

