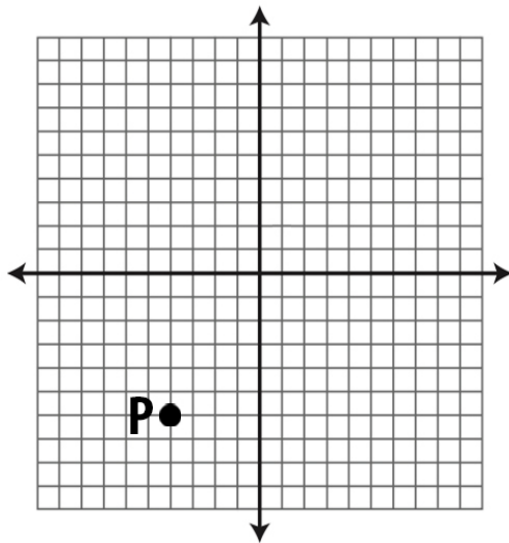**Flocabulary**

# REFLECTION & DISTANCE
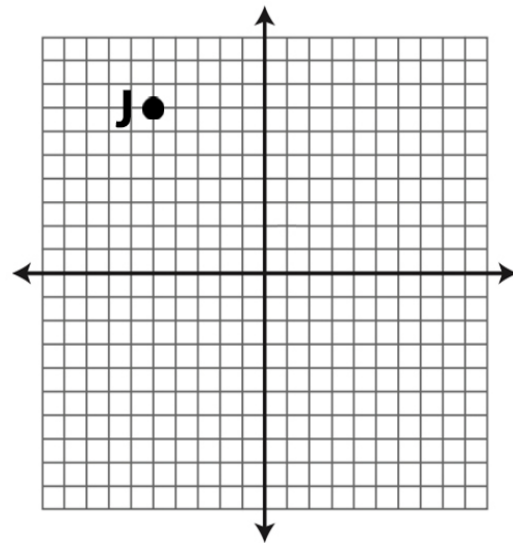## ON THE COORDINATE PLANE

**PART I** Reflect each point across the given axis, and write the coordinates of the point that results.
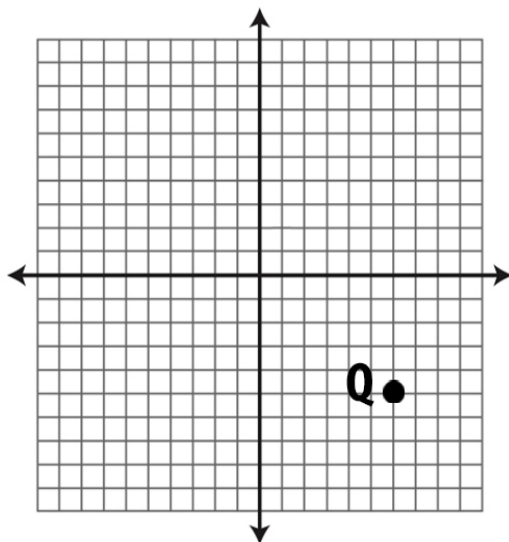
**1.** Reflect point P across the y-axis.
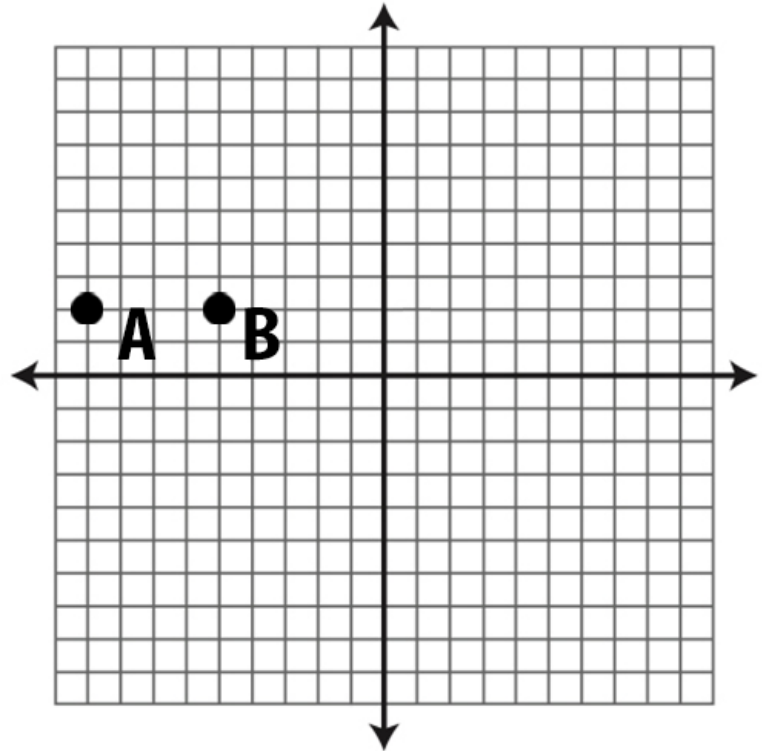
**2.** Reflect point J across the x-axis.
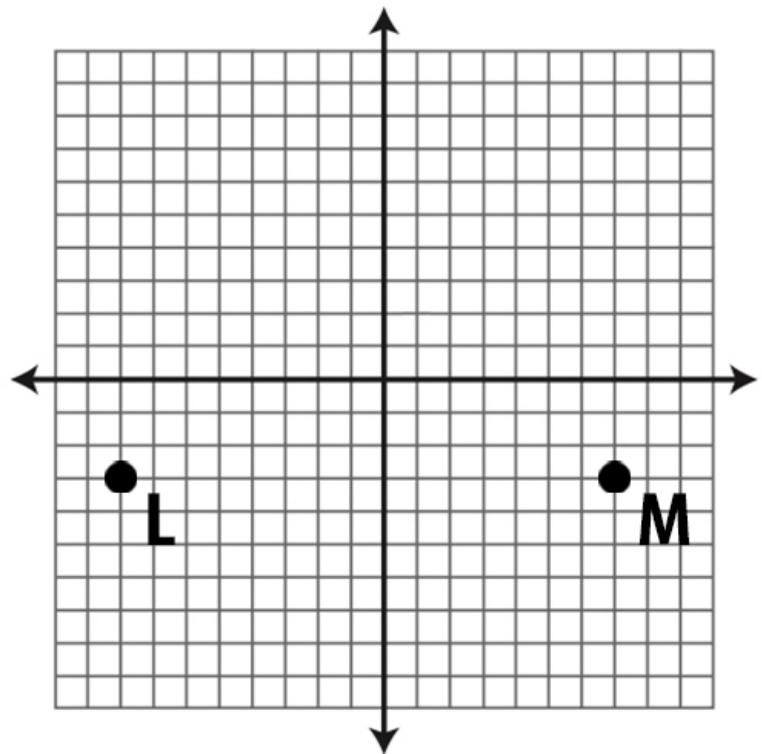
**3.** Reflect point Q across the y-axis.

**PART II** Find the distance between each of the sets of points below. Explain how you can find the answer using absolute values.

**1.** _____

_____

_____

_____

_____

_____



**2.** _____

_____

_____

_____

_____

_____

## PART III  Solve each problem below.

**1.** Determine whether the points (-5,8) and (-5,-4) lie on the same horizontal or vertical line. Explain how you know. Then, find the length of the line segment that connects them.

**2.** Skye's city is on a grid like the coordinate plane. He unicycles from point (11,15) to point (11, -12). How many units does he travel? Explain how you found your answer using absolute value.

**BONUS** Plot the following points on the coordinate plane. Connect them, and find the area of the shape that results.

(3,2)

(-6,2)

(-6,-8)

(3,-8)