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Module 11 Transformation of Shapes

1. The point located at $(0,-3)$ is translated two units left. What are the coordinates of the translated point?
2. The point located at $(-4,-3)$ is translated three units up. What are the coordinates of the translated point?
3. The point $(7,-5)$ is translated six units left and five units up. What are the coordinates of the translated point?

Translate the figure using the given motion rule.
4. $(x, y) \rightarrow(x-2, y+4)$

5. $(x, y) \rightarrow(x+1, y-7)$

6. The point located at $(6,-1)$ is reflected across the $x$-axis. What are the coordinates of the translated point?
7. The point located at $(-2,8)$ is reflected across the $x$-axis and then is reflected across the $y$-axis. What are the coordinates of the translated point?

## Reflect the figure across the given axis.

8. $y$-axis

9. $x$-axis


## Journal

1. How are translations and reflections the same? How are they different?
2. Explain how you know which coordinates move in which direction when translating a point in the coordinate plane.
3. When reflecting a point across an axis, explain how you know which coordinate becomes the opposite and which coordinate stays the same.

## Cumulative Review

1. Draw a concave pentagon.
2. Draw a regular hexagon.
3. Draw a cylinder.

# NAME <br> Module 11 Transformation of Shapes <br> Lesson 1 Translations and Reflections 

4. A circle has a diameter of 125 feet. What is the radius of the circle?
5. In which quadrant is the $x$-coordinate of any point positive and the $y$-coordinate of any point negative?
6. a. How many faces does a triangular pyramid have?
b. How many vertices does a triangular pyramid have?
c. How many edges does a triangular pyramid have?
7. Draw two different nets of a square pyramid.

## Additional Work Area

