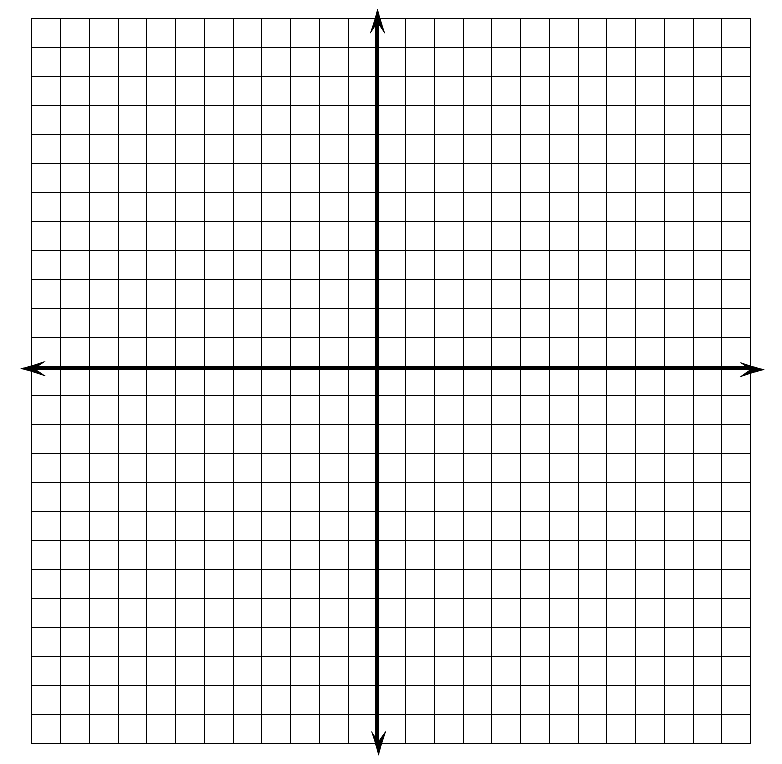
Lesson 16: Symmetry in the Coordinate Plane

Problem Set

1. Locate a point in Quadrant IV of the coordinate plane. Label the point *,* and write its ordered pair next to it.
   1. Reflect point over an axis so that its image is in Quadrant III. Label the image ,and write its ordered pair next to it. Which axis did you reflect over? What is the only difference in the ordered pairs of points and ?
   2. Reflect point over an axis so that its image is in Quadrant II. Label the image ,and write its ordered pair next to it. Which axis did you reflect over? What is the only difference in the ordered pairs of points and ? How does the ordered pair of point relate to the ordered pair of point ?
   3. Reflect point over an axis so that its image is in Quadrant I. Label the image , and write its ordered pair next to it. Which axis did you reflect over? How does the ordered pair for point compare to the ordered pair for point ? How does the ordered pair for point compare to points and ?
2. Bobbie listened to her teacher’s directions and navigated from the point to . She knows that she has the correct answer, but she forgot part of the teacher’s directions. Her teacher’s directions included the following:

“Move units down, reflect about the ? -axis, move up units, and then move right units.”

Help Bobbie determine the missing axis in the directions, and explain your answer.