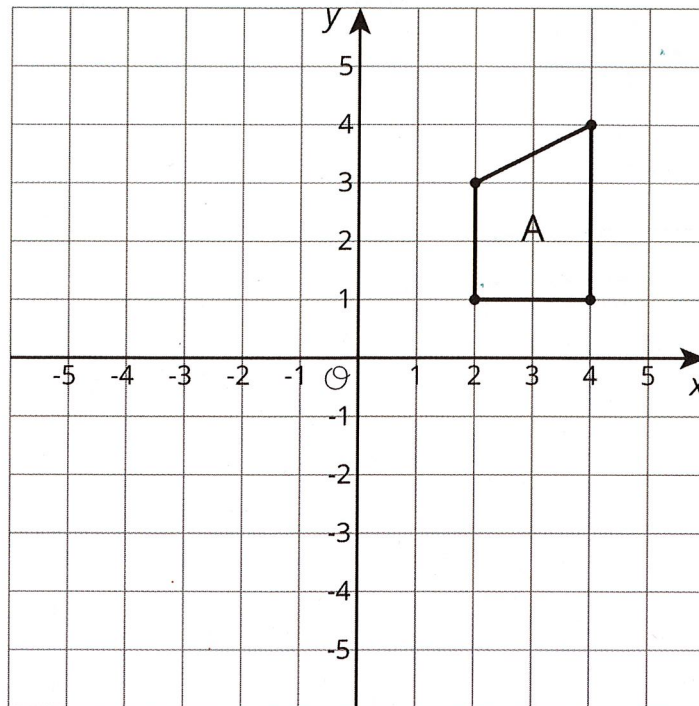


**Lesson 6 Practice Problems**

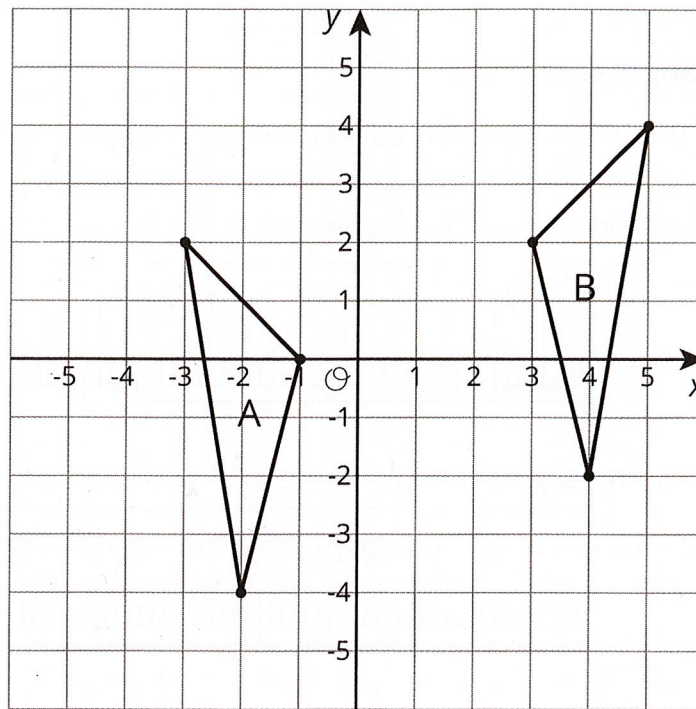
1. Here is Trapezoid A in the coordinate plane:



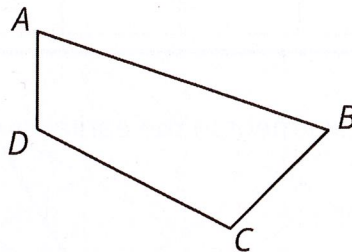
- a. Draw Polygon B, the image of A, using the  $y$ -axis as the line of reflection.
  - b. Draw Polygon C, the image of B, using the  $x$ -axis as the line of reflection.
  - c. Draw Polygon D, the image of C, using the  $x$ -axis as the line of reflection.
2. The point  $(-4, 1)$  is rotated 180 degrees counterclockwise using center  $(-3, 0)$ . What are the coordinates of the image?
- A.  $(-5, -2)$
  - B.  $(-4, -1)$
  - C.  $(-2, -1)$
  - D.  $(4, -1)$



3. Describe a sequence of transformations for which Triangle B is the image of Triangle A.



4. Here is quadrilateral  $ABCD$ .



Draw the image of quadrilateral  $ABCD$  after each transformation.

- The translation that takes  $B$  to  $D$ .
- The reflection over segment  $BC$ .
- The rotation about point  $A$  by angle  $DAB$ , counterclockwise.