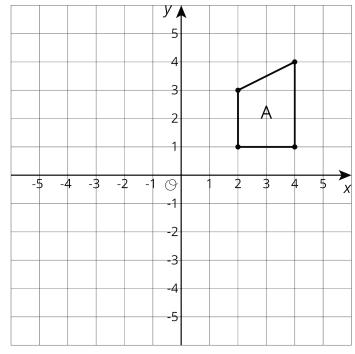


## **Lesson 5 Practice Problems**

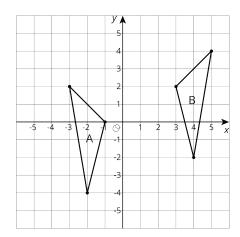
1. Here is Trapezoid A in the coordinate plane:



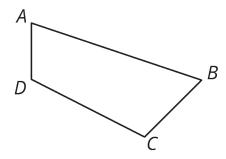
- a. Draw Polygon B, the image of A, using the *y*-axis as the line of reflection.
- b. Draw Polygon C, the image of B, using the x-axis as the line of reflection.
- c. Draw Polygon D, the image of C, using the x-axis as the line of reflection.
- 2. The point (-4, 1) is rotated 180 degrees counterclockwise 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.

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

(From Unit 1, Lesson 2.)