## 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 $A B C D$.


Draw the image of quadrilateral $A B C D$ after each transformation.
a. The translation that takes $B$ to $D$.
b. The reflection over segment $B C$.
c. The rotation about point $A$ by angle $D A B$, counterclockwise.

