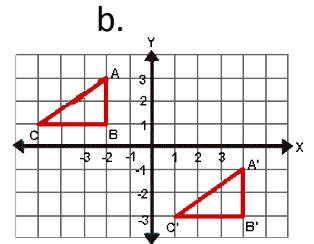
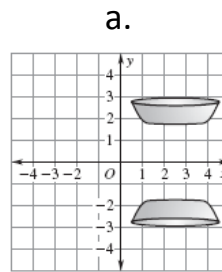


10.8b Transformations in the Coordinate Plane

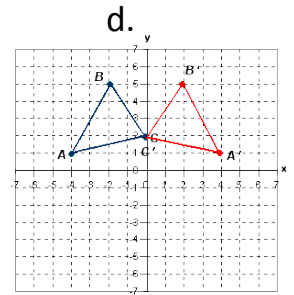
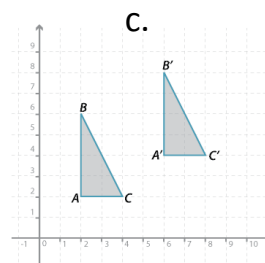
Match the description to the image that shows that transformation.

1) Reflection over the y-axis _____



2) Translation $(x, y) \rightarrow (x + 4, y + 2)$ _____

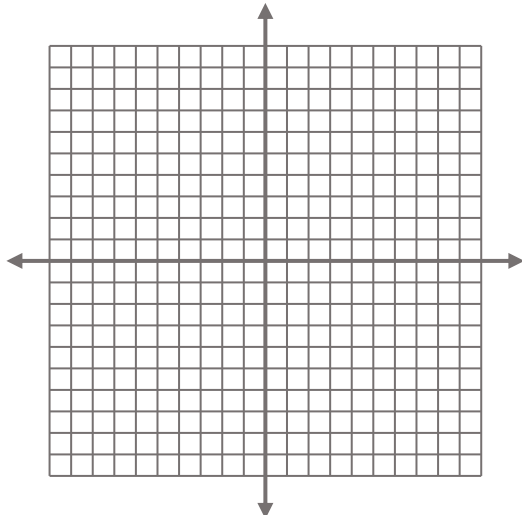
3) Translation $(x, y) \rightarrow (x + 6, y - 4)$ _____



4) Reflection over the x-axis _____

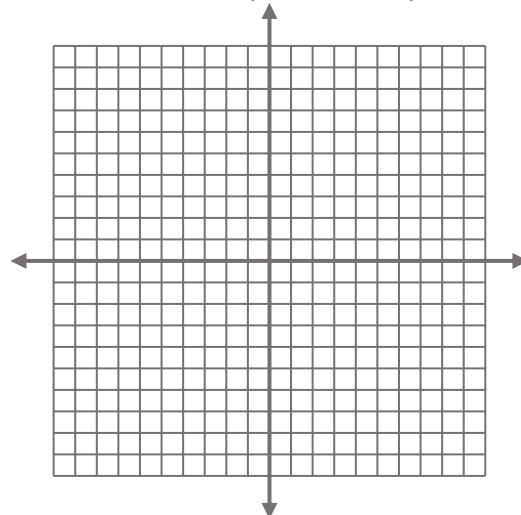
**Draw the triangle with the given vertices.
Draw the new image using the specified transformation.
Then write the coordinates of the new image.**

5) P (1,3), Q (5,1), R (7,7)
Reflect over the y-axis



P' (,)
Q' (,)
R' (,)

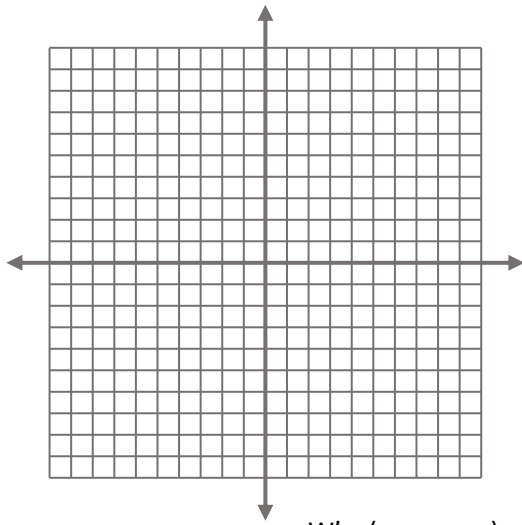
6) A (-1,1), B (3,0), C (1,-4)
 $(x, y) \rightarrow (x - 3, y + 3)$



A' (,)
B' (,)
C' (,)

Draw quadrilateral $WXYZ$ with the vertices $W(-3,0)$, $X(1,3)$, $Y(4,1)$, and $Z(2,-4)$ for each graph. Draw the new image using the specified transformation. Then write the coordinates of the new image.

7) Reflect $WXYZ$ over the x-axis



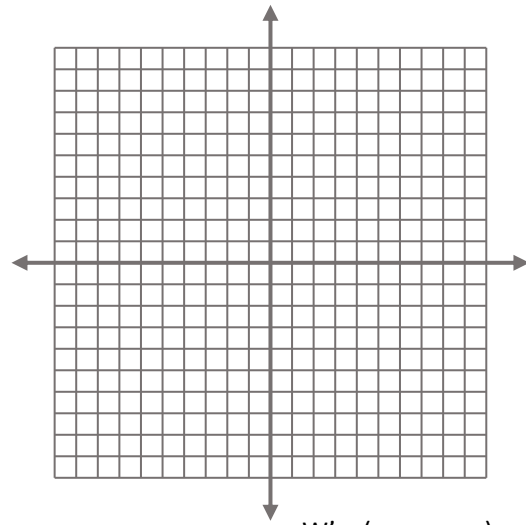
W' (,)

X' (,)

Y' (,)

Z' (,)

8) $(x, y) \rightarrow (x-2, y+3)$



W' (,)

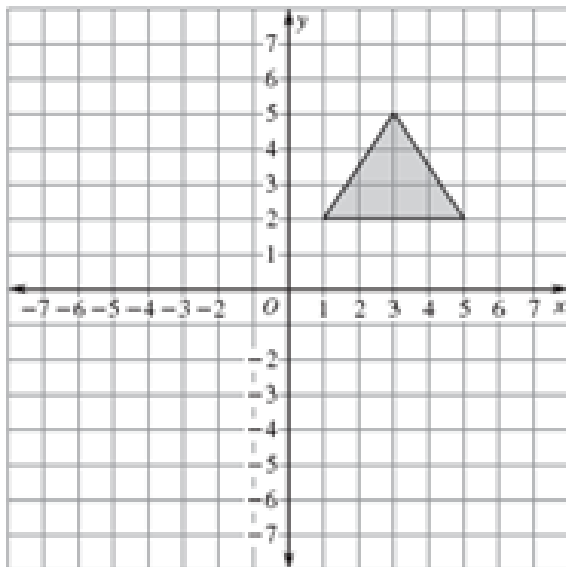
X' (,)

Y' (,)

Z' (,)

Transform the image as directed below.

9) Reflect the image over the y-axis.



10) Reflect the image over the x-axis.

