

Representing and Describing Transformations

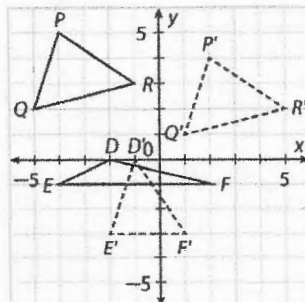
Practice and Problem Solving: A/B

1. Use coordinate notation to describe the transformation of $\triangle PQR$.

$$P(-4, 5) \rightarrow P'(2, 4)$$

$$Q(-5, 2) \rightarrow Q'(1, 1)$$

$$R(-1, 3) \rightarrow R'(5, 2)$$



2. Describe the algebraic rule for $\triangle PQR$.

$$(x, y) \rightarrow (x + 6, y - 1)$$

Draw the image of each figure under the given transformation, then describe it in words.

3. $(x, y) \rightarrow (x + 4, y - 5)$

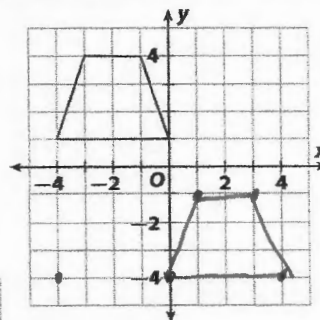
$$(0, 1) \rightarrow (4, -4)$$

$$(-4, 1) \rightarrow (0, -4)$$

$$(-3, 4) \rightarrow (1, -1)$$

$$(-1, 4) \rightarrow (3, -1)$$

Shift right 4,
down 5



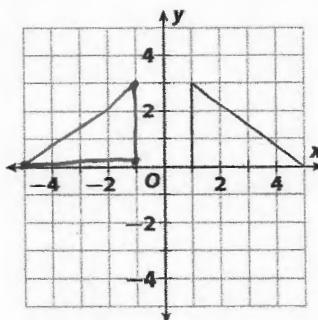
4. $(x, y) \rightarrow (-x, y)$

$$(1, 0) \rightarrow (-1, 0)$$

$$(1, 3) \rightarrow (-1, 3)$$

$$(5, 0) \rightarrow (-5, 0)$$

flip over
y-axis

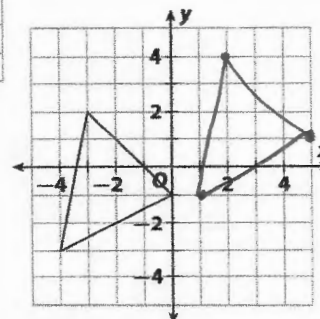


5. $(x, y) \rightarrow (x + 5, y + 2)$

$$(0, -1) \rightarrow (5, 1)$$

$$(-3, 2) \rightarrow (2, 4)$$

$$(-4, -3) \rightarrow (1, -1)$$



6. $(x, y) \rightarrow (x, -y)$

$$(1, 0) \rightarrow (1, 0)$$

$$(1, 3) \rightarrow (1, -3)$$

$$(5, 0) \rightarrow (5, 0)$$

flip over
x-axis

