

Unit 9.1 Translations PRACTICE

Write a rule to describe each transformation.

1) $X(-5, -2)$ to $X'(0, -5)$

translation: $(x, y) \rightarrow (x + 5, y - 3)$

2) $F(-4, -1)$ to $F'(-4, 3)$

translation: $(x, y) \rightarrow (x, y + 4)$

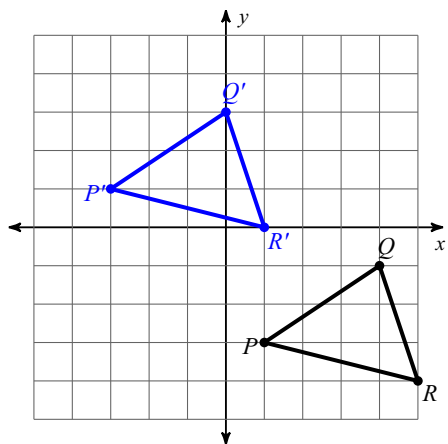
3) $I(-4, 4)$ to $I'(3, -2)$

translation: $(x, y) \rightarrow (x + 7, y - 6)$

4) $F(4, -4)$ to $F'(2, 2)$

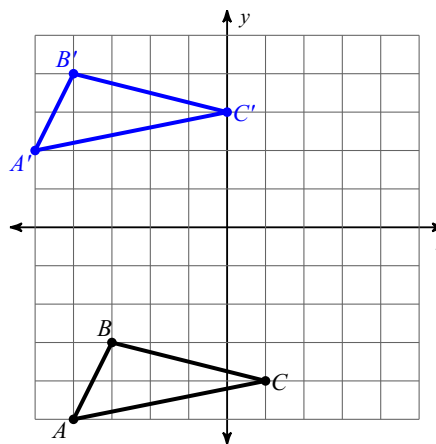
translation: $(x, y) \rightarrow (x - 2, y + 6)$

5)



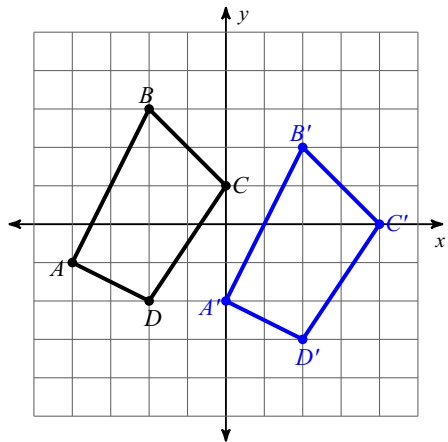
translation: $(x, y) \rightarrow (x - 4, y + 4)$

6)



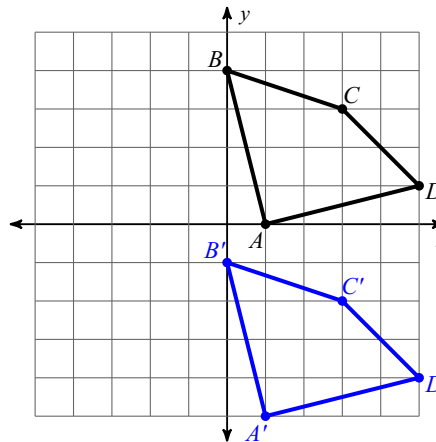
translation: $(x, y) \rightarrow (x - 1, y + 7)$

7)



translation: $(x, y) \rightarrow (x + 4, y - 1)$

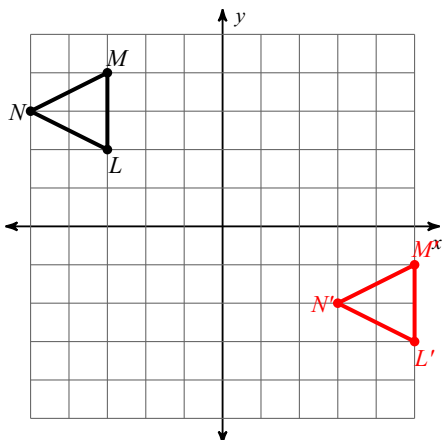
8)



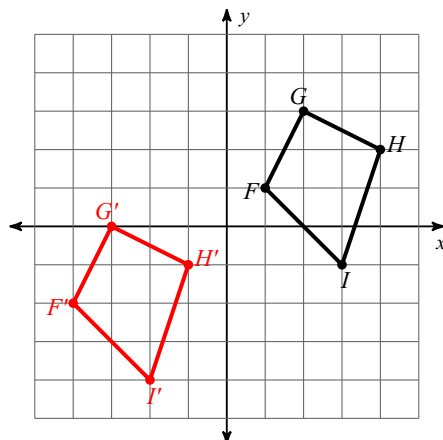
translation: $(x, y) \rightarrow (x, y - 5)$

Graph the image of the figure using the transformation given.

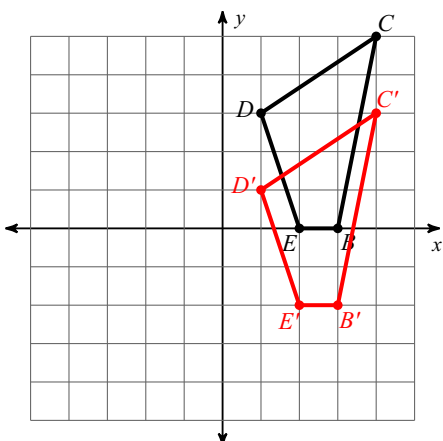
9) translation: $(x, y) \rightarrow (x + 8, y - 5)$



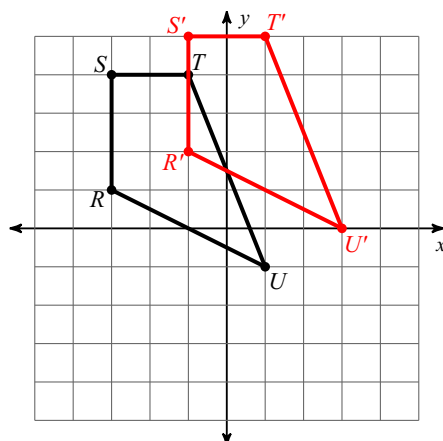
10) translation: $(x, y) \rightarrow (x - 5, y - 3)$



11) translation: $(x, y) \rightarrow (x, y - 2)$

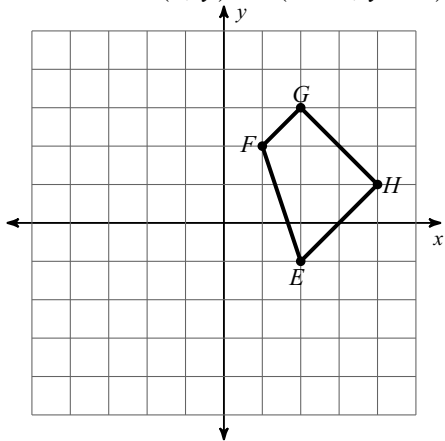


12) translation: $(x, y) \rightarrow (x + 2, y + 1)$



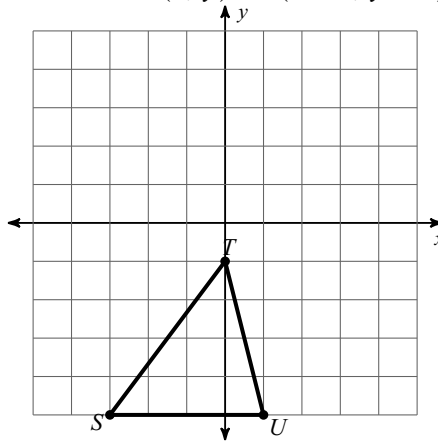
Find the coordinates of the vertices of each figure after the given transformation.

13) translation: $(x, y) \rightarrow (x - 1, y - 2)$



$E'(1, -3), F'(0, 0), G'(1, 1), H'(3, -1)$

14) translation: $(x, y) \rightarrow (x - 2, y + 1)$



$S'(-5, -4), T'(-2, 0), U'(-1, -4)$