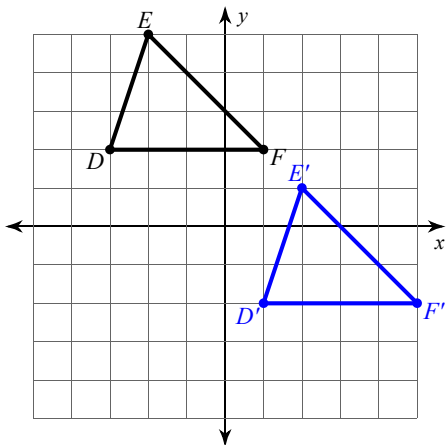


Assignment

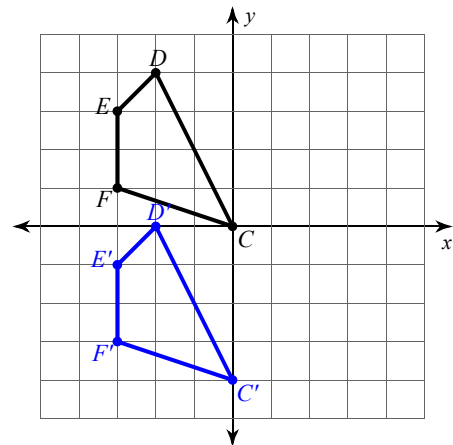
Write a rule to describe each translation from the pre-image to the image.

1)



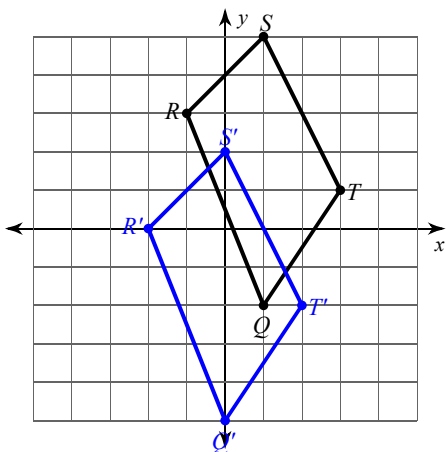
translation: $(x, y) \rightarrow (x + 4, y - 4)$

2)



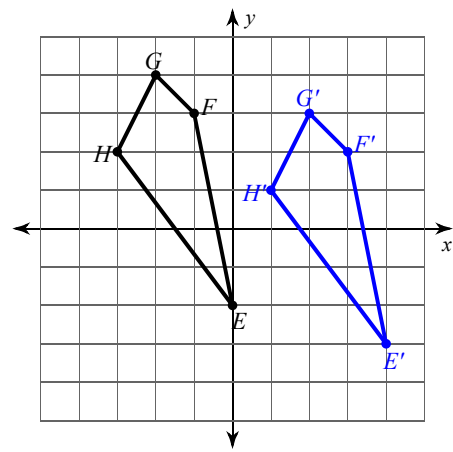
translation: $(x, y) \rightarrow (x, y - 4)$

3)



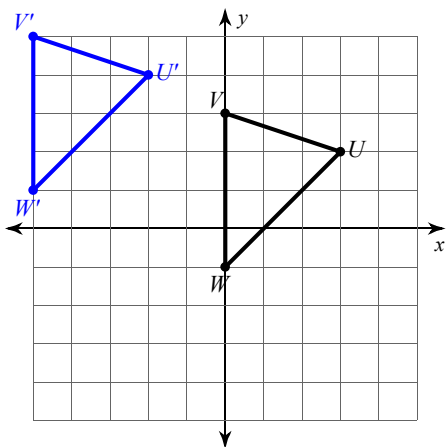
translation: $(x, y) \rightarrow (x - 1, y - 3)$

4)



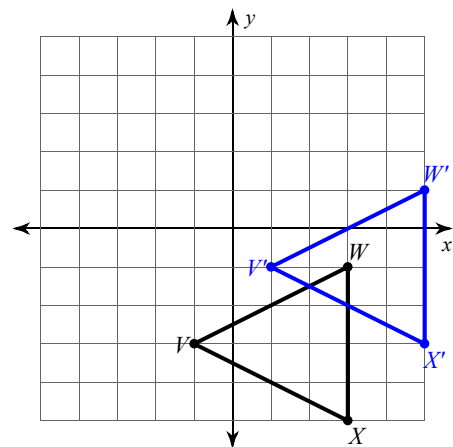
translation: $(x, y) \rightarrow (x + 4, y - 1)$

5)



translation: $(x, y) \rightarrow (x - 5, y + 2)$

6)



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

7) $S(-5, -2), T(-4, 0), U(-1, 0), V(-3, -5)$

to

$S'(0, 0), T'(1, 2), U'(4, 2), V'(2, -3)$

translation: $(x, y) \rightarrow (x + 5, y + 2)$

8) $V(1, 1), W(3, 5), X(5, 1)$

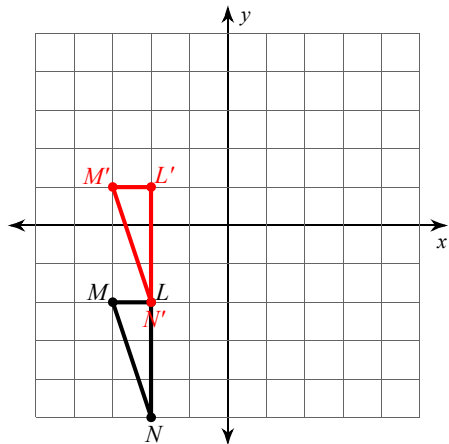
to

$V'(0, -1), W'(2, 3), X'(4, -1)$

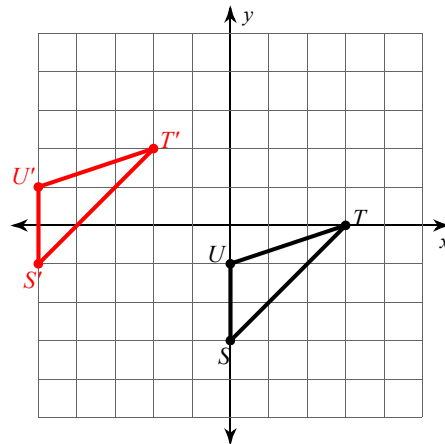
translation: $(x, y) \rightarrow (x - 1, y - 2)$

Graph the image using the transformation given.

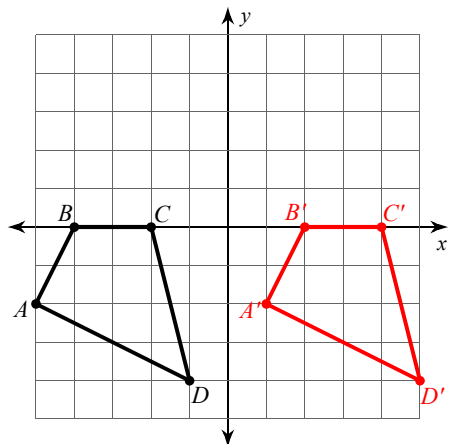
9) translation: $(x, y) \rightarrow (x, y + 3)$



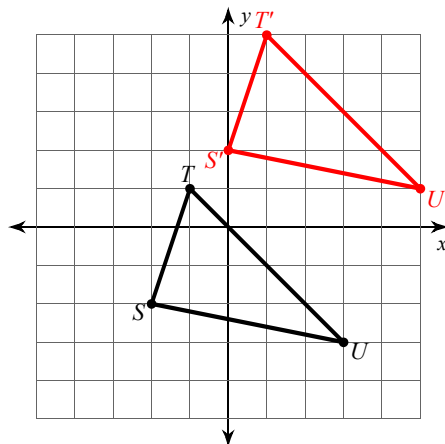
10) translation: $(x, y) \rightarrow (x - 5, y + 2)$



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

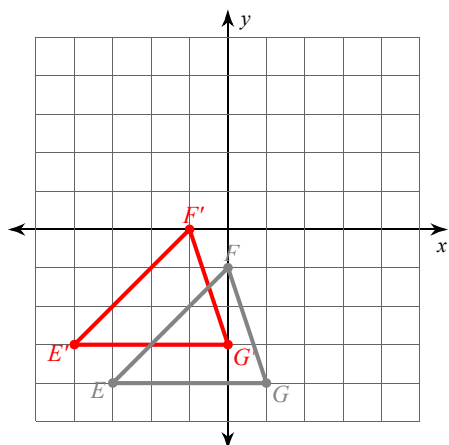


12) translation: $(x, y) \rightarrow (x + 2, y + 4)$

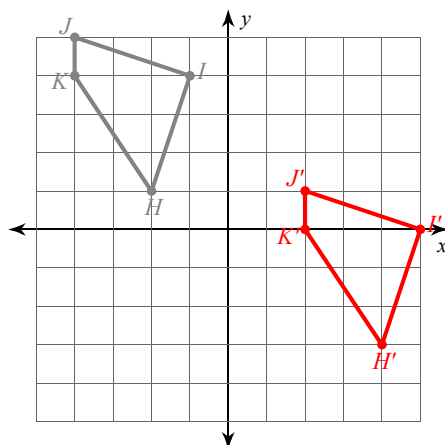


Graph the pre-image and image using the given coordinates and transformation.

13) translation: $(x, y) \rightarrow (x - 1, y + 1)$
 $E(-3, -4), F(0, -1), G(1, -4)$



14) translation: $(x, y) \rightarrow (x + 6, y - 4)$
 $K(-4, 4), J(-4, 5), I(-1, 4), H(-2, 1)$



Write a rule to describe each translation from the pre-image to the image.

15) $I(-1, 0), H(1, 4), G(3, 3), F(2, -2)$
 to
 $I'(1, -3), H'(3, 1), G'(5, 0), F'(4, -5)$
 translation: 2 units right and 3 units down

16) $Z(0, 2), Y(1, 4), X(2, 4), W(3, 3)$
 to
 $Z'(1, -1), Y'(2, 1), X'(3, 1), W'(4, 0)$
 translation: 1 unit right and 3 units down