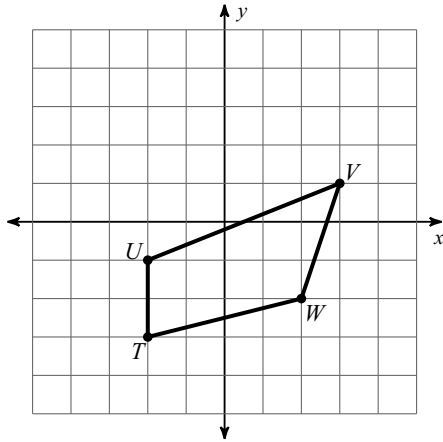


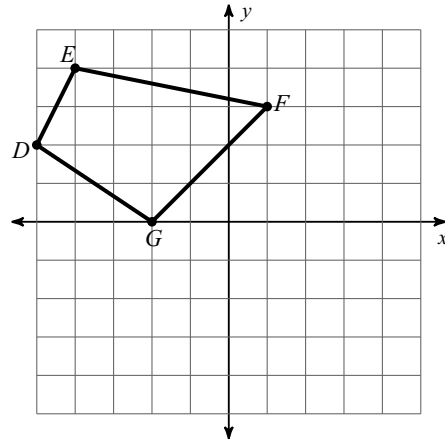
Translation Practice

Graph the image of the figure using the transformation given.

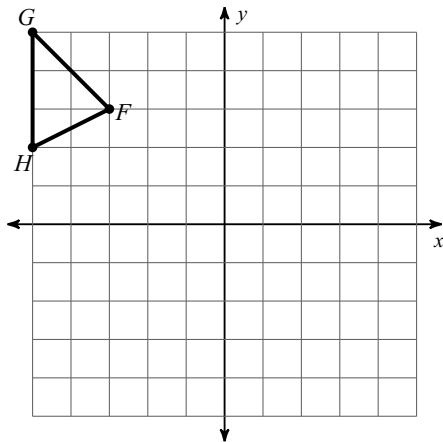
1) translation: 4 units up



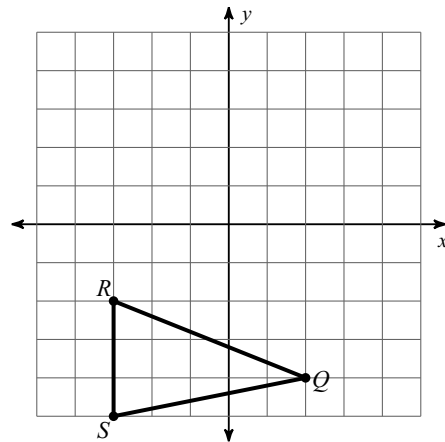
2) translation: 3 units right and 4 units down



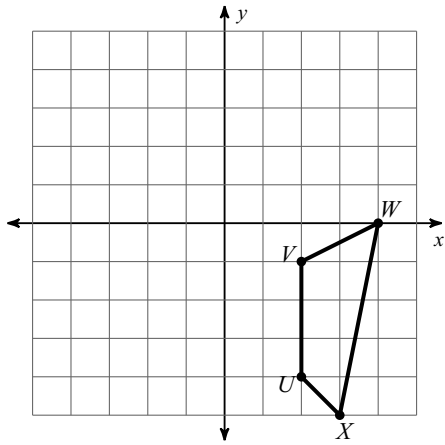
3) translation: 6 units right and 5 units down



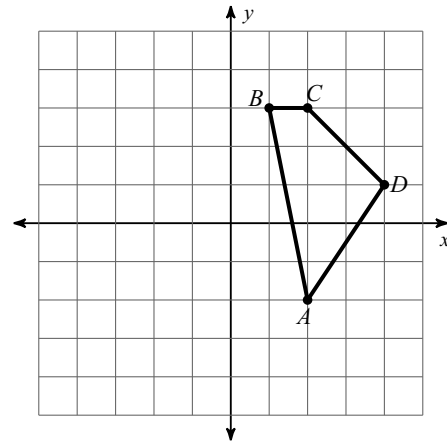
4) translation: 3 units right



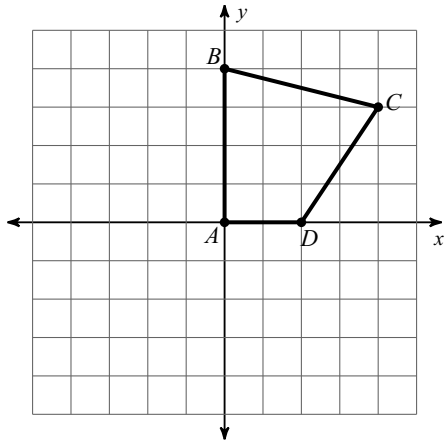
5) translation: $(x, y) \rightarrow (x - 3, y + 3)$



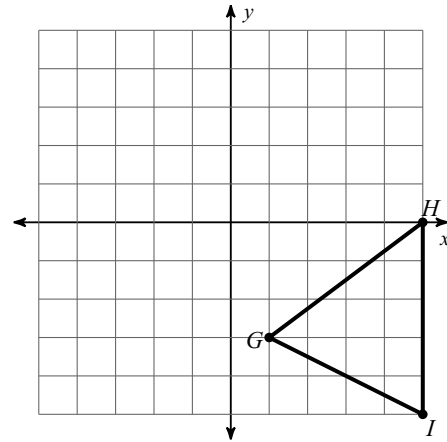
6) translation: $(x, y) \rightarrow (x - 5, y - 2)$



7) translation: $(x, y) \rightarrow (x - 3, y - 2)$

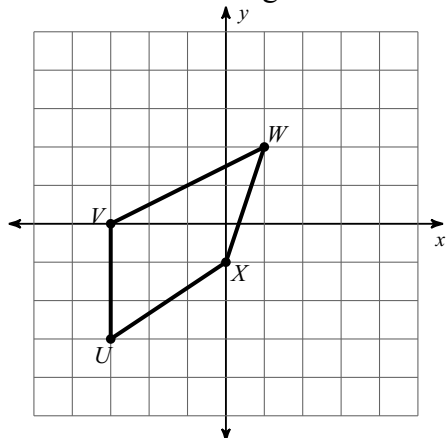


8) translation: $(x, y) \rightarrow (x, y + 1)$

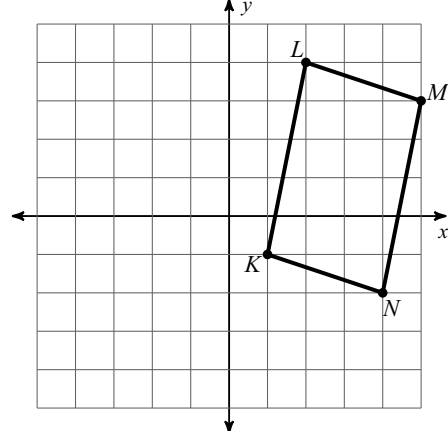


Find the coordinates of the vertices of each figure after the given transformation.

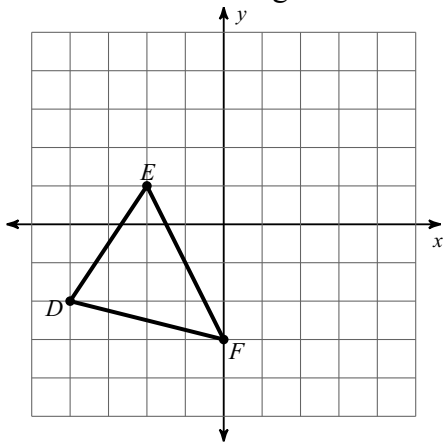
9) translation: 1 unit right



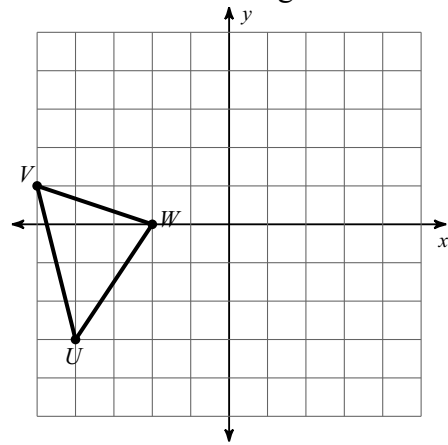
10) translation: 5 units left and 1 unit down



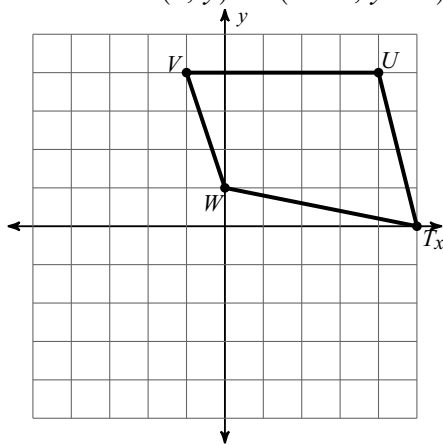
11) translation: 5 units right and 2 units down



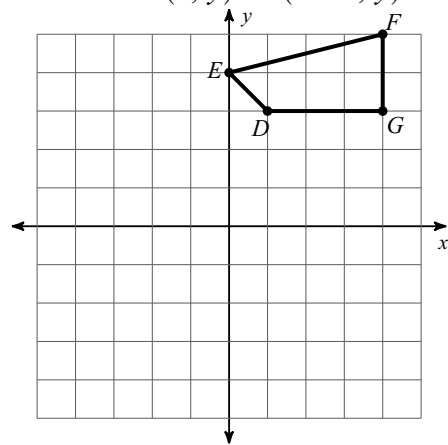
12) translation: 5 units right and 4 units up



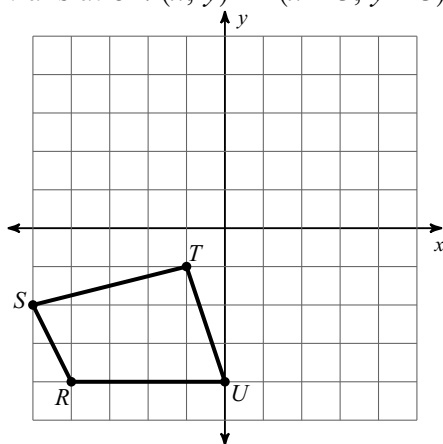
13) translation: $(x, y) \rightarrow (x - 1, y - 4)$



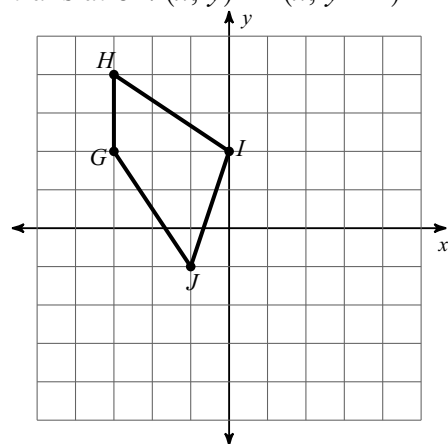
14) translation: $(x, y) \rightarrow (x - 1, y)$



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



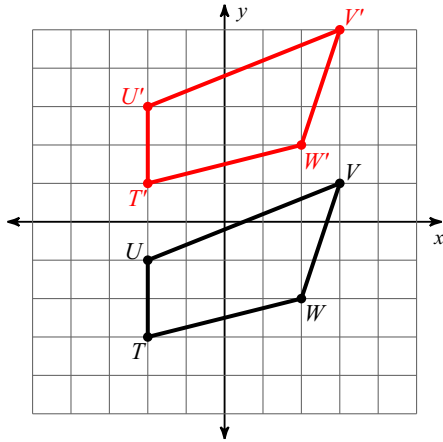
16) translation: $(x, y) \rightarrow (x, y - 4)$



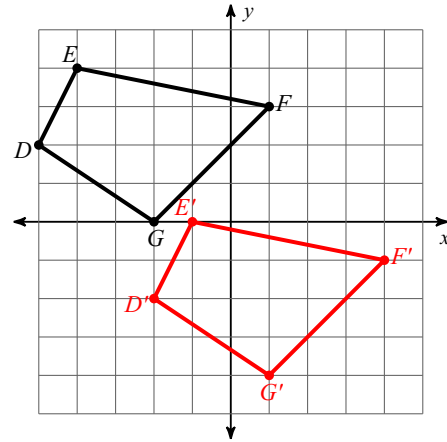
Translation Practice

Graph the image of the figure using the transformation given.

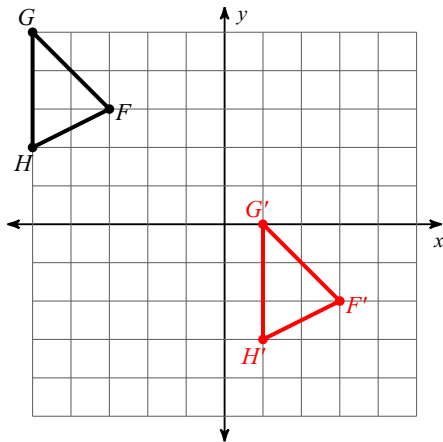
1) translation: 4 units up



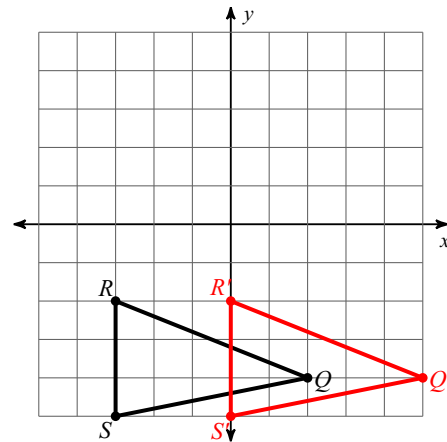
2) translation: 3 units right and 4 units down



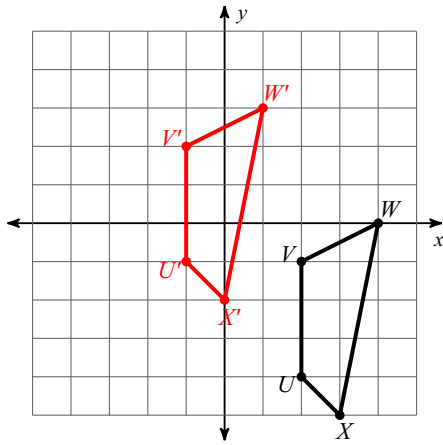
3) translation: 6 units right and 5 units down



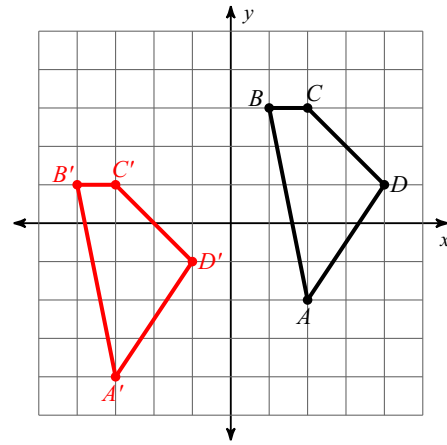
4) translation: 3 units right



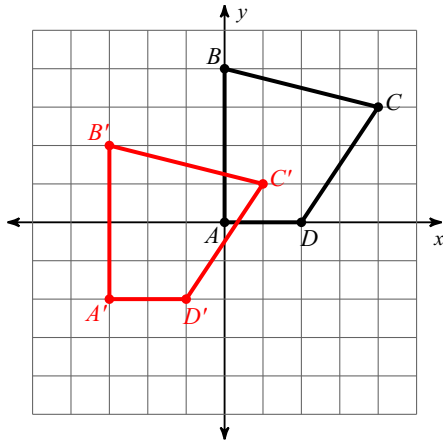
5) translation: $(x, y) \rightarrow (x - 3, y + 3)$



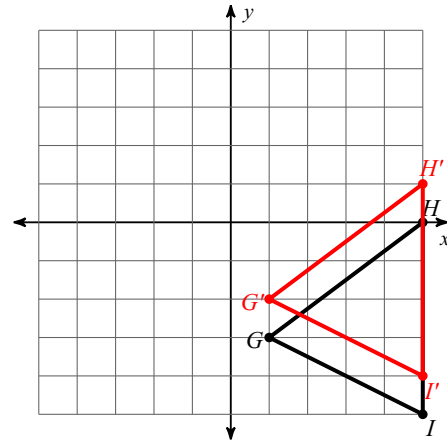
6) translation: $(x, y) \rightarrow (x - 5, y - 2)$



7) translation: $(x, y) \rightarrow (x - 3, y - 2)$

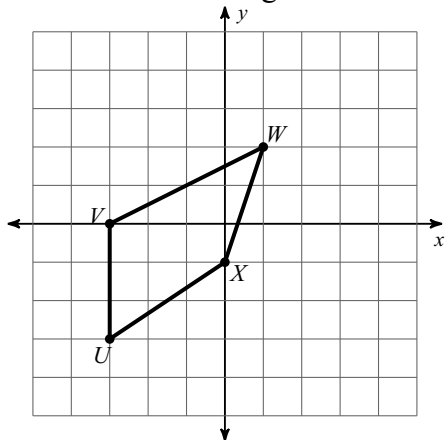


8) translation: $(x, y) \rightarrow (x, y + 1)$



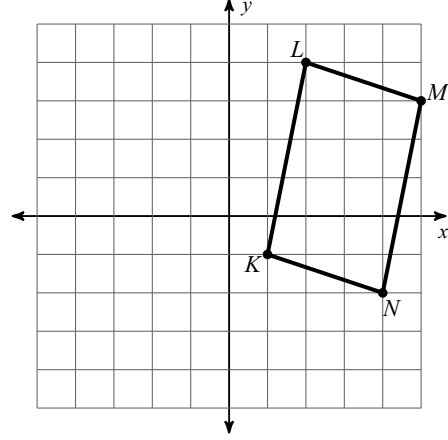
Find the coordinates of the vertices of each figure after the given transformation.

9) translation: 1 unit right



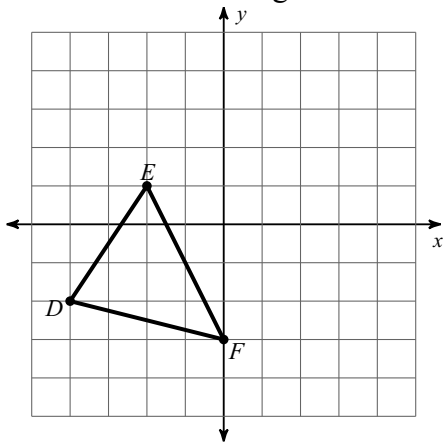
$U'(-2, -3), V'(-2, 0), W'(2, 2), X'(1, -1)$

10) translation: 5 units left and 1 unit down



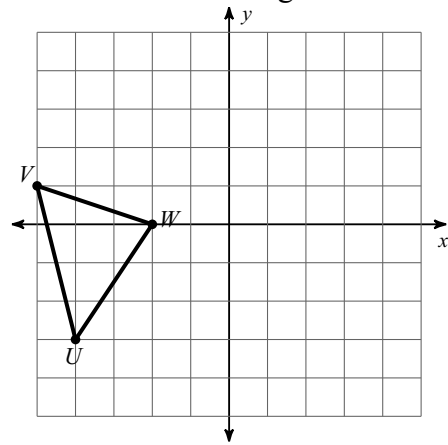
$K'(-4, -2), L'(-3, 3), M'(0, 2), N'(-1, -3)$

11) translation: 5 units right and 2 units down



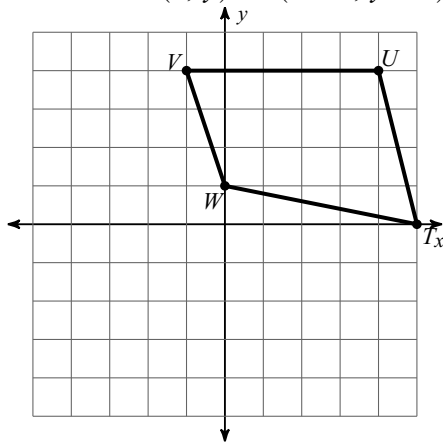
$$D'(1, -4), E'(3, -1), F'(5, -5)$$

12) translation: 5 units right and 4 units up



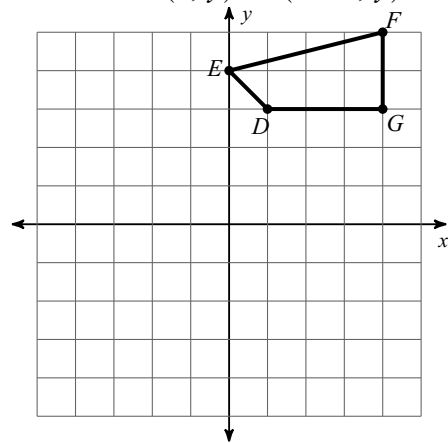
$$U'(1, 1), V'(0, 5), W'(3, 4)$$

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



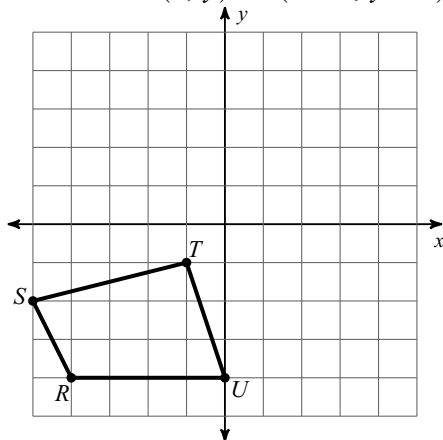
$$W'(-1, -3), V'(-2, 0), U'(3, 0), T'(4, -4)$$

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



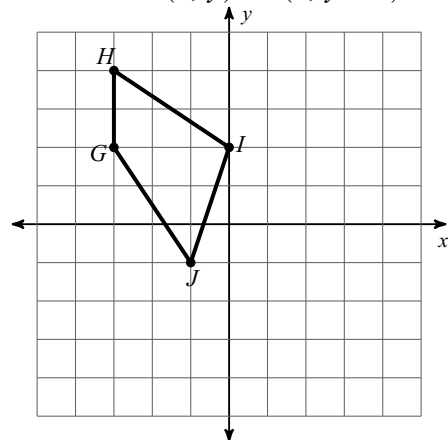
$$D'(0, 3), E'(-1, 4), F'(3, 5), G'(3, 3)$$

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



$$R'(-1, -1), S'(-2, 1), T'(2, 2), U'(3, -1)$$

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



$$G'(-3, -2), H'(-3, 0), I'(0, -2), J'(-1, -5)$$