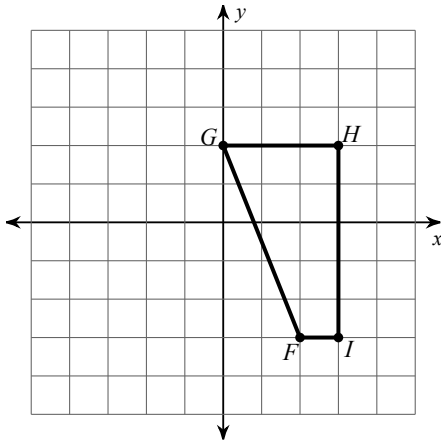


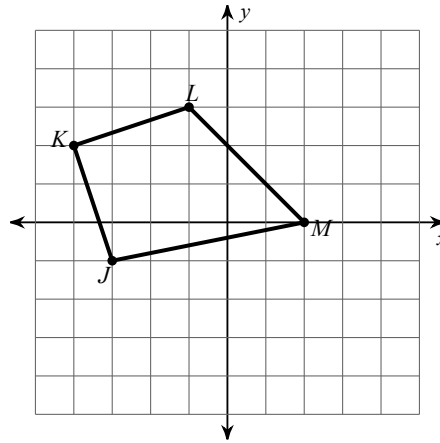
Translations CW

Graph the image of the figure using the transformation given.

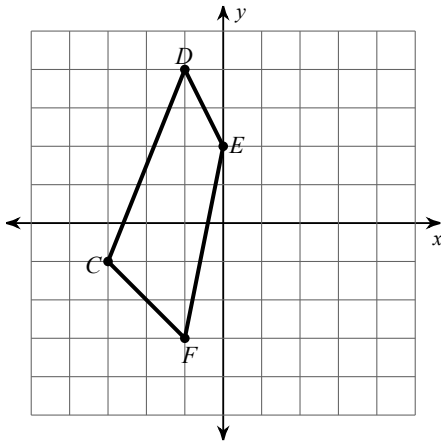
1) translation: 2 units left and 1 unit down



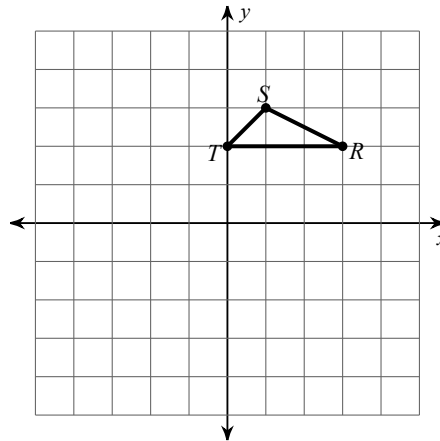
2) translation: 1 unit right and 2 units up



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

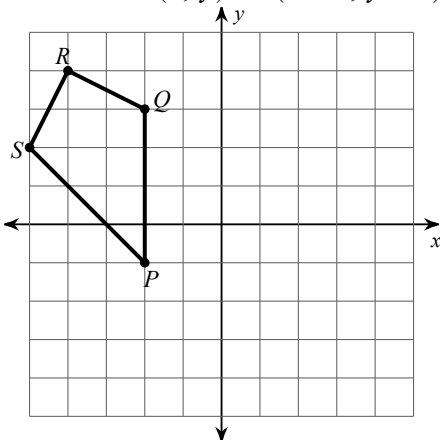


4) translation: $(x, y) \rightarrow (x - 4, y + 2)$



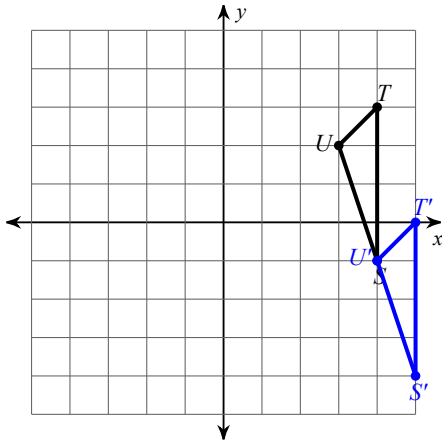
Find the coordinates of the vertices of each figure after the given transformation.

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

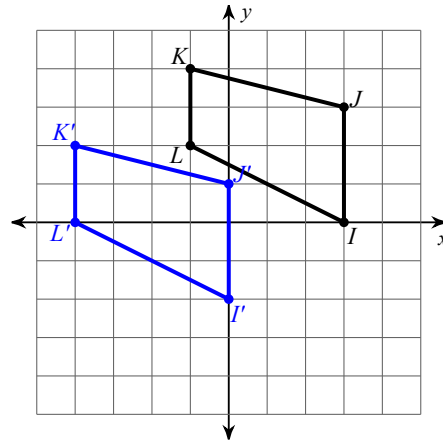


Write a rule to describe each transformation.

6)

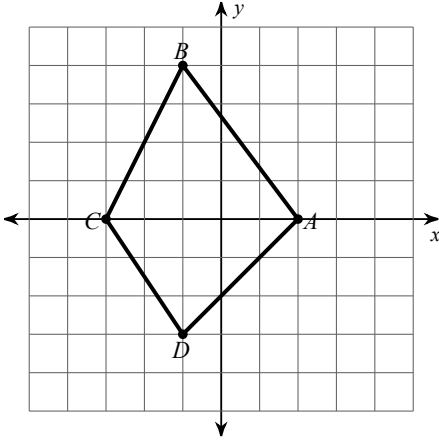


7)

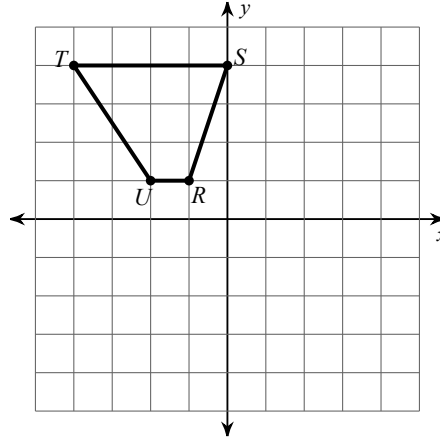


Graph the image of the figure using the transformation given.

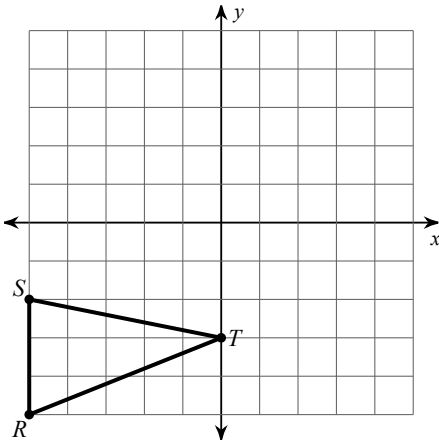
8) translation: 1 unit left and 1 unit up



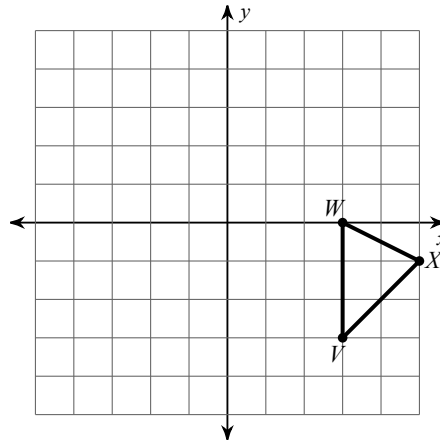
9) translation: 3 units right



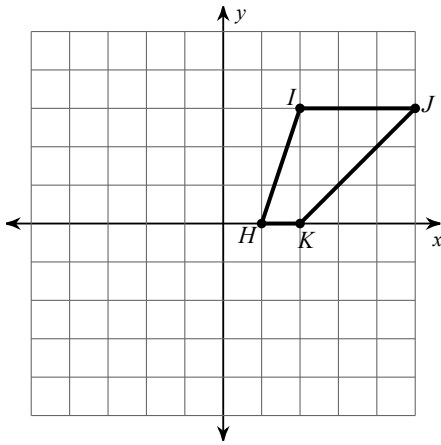
10) translation: 2 units up



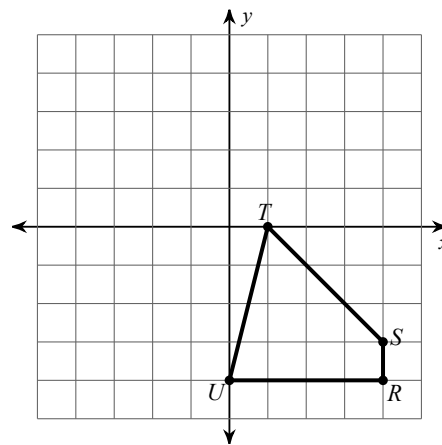
11) translation: 1 unit left and 2 units down



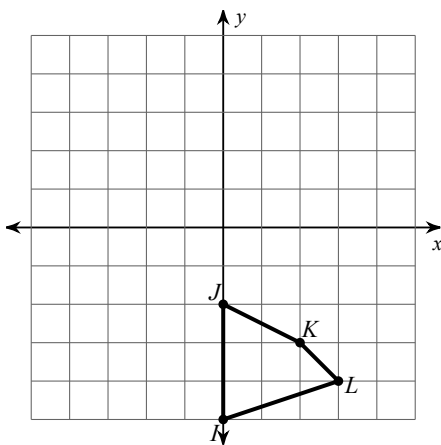
12) translation: 5 units left and 5 units down



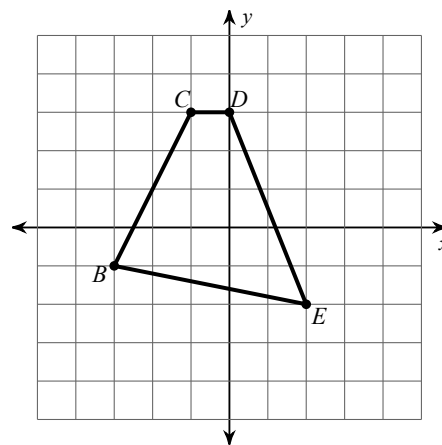
13) translation: $(x, y) \rightarrow (x - 2, y + 4)$



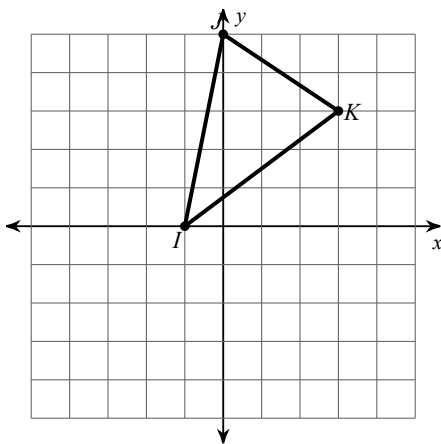
14) translation: $(x, y) \rightarrow (x - 4, y + 2)$



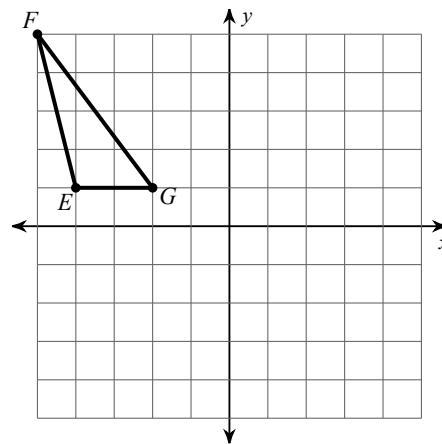
15) translation: $(x, y) \rightarrow (x + 3, y)$



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

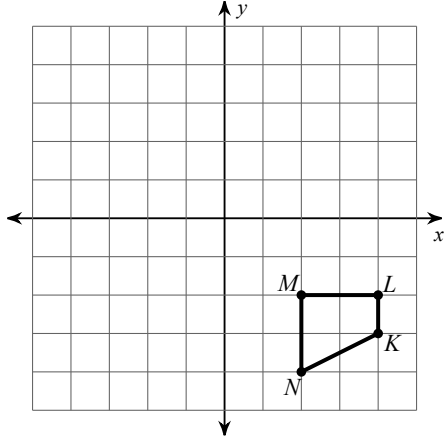


17) translation: $(x, y) \rightarrow (x + 5, y - 2)$

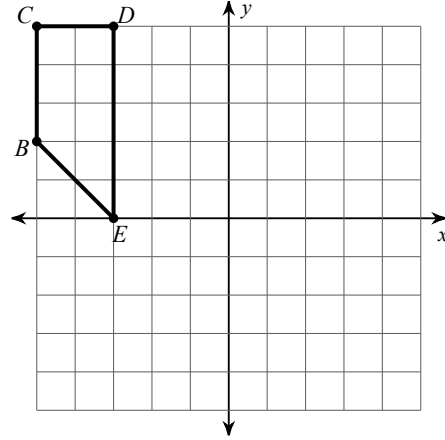


Find the coordinates of the vertices of each figure after the given transformation.

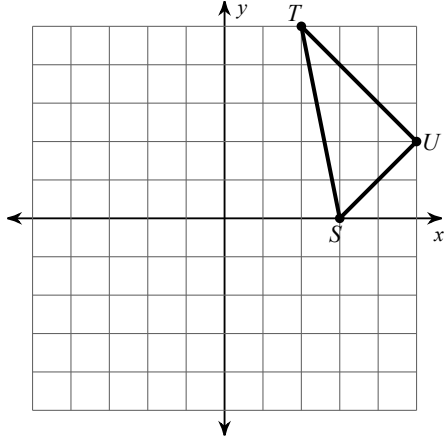
18) translation: $(x, y) \rightarrow (x - 5, y + 3)$



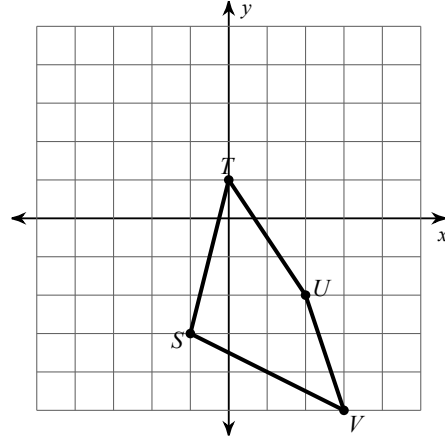
19) translation: $(x, y) \rightarrow (x + 2, y - 5)$



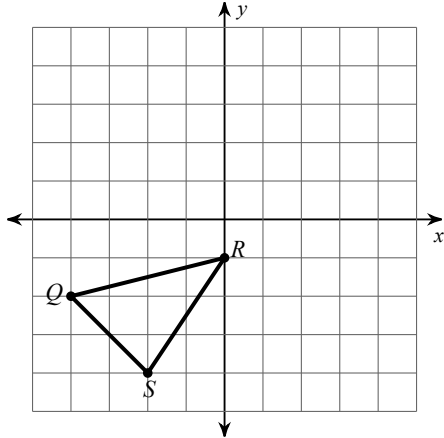
20) translation: $(x, y) \rightarrow (x - 6, y - 2)$



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

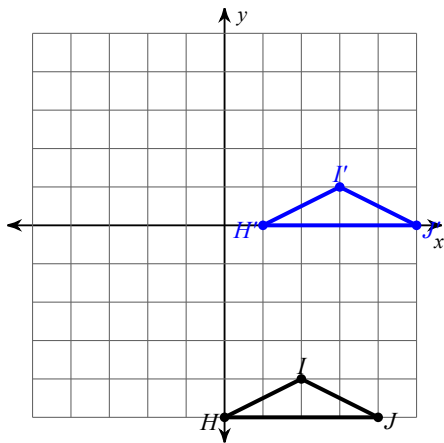


22) translation: $(x, y) \rightarrow (x + 2, y + 2)$

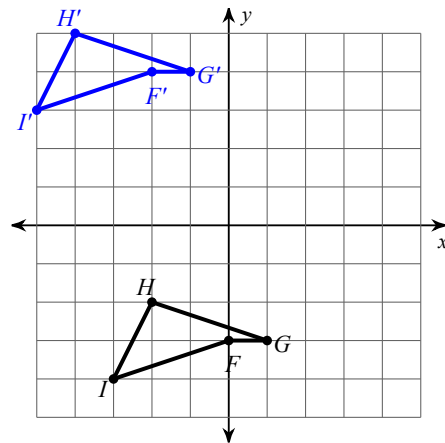


Write a rule to describe each transformation.

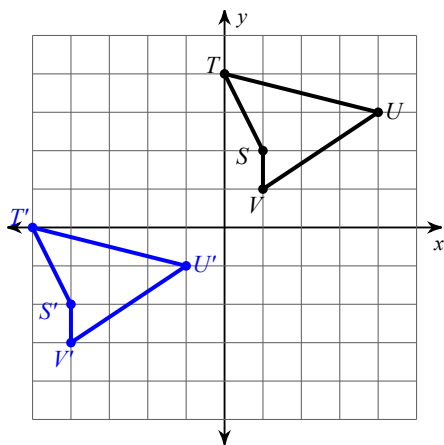
23)



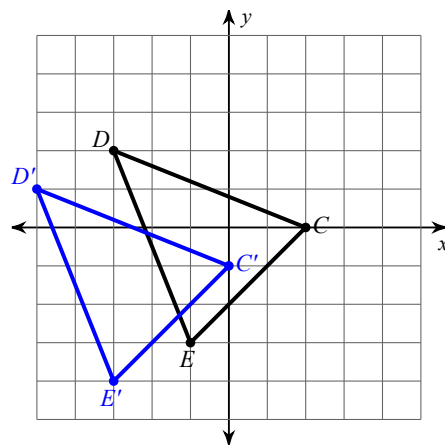
24)



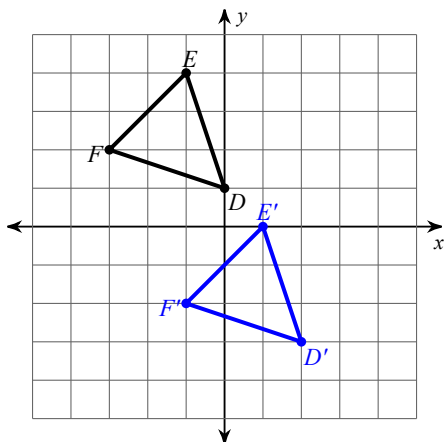
25)



26)



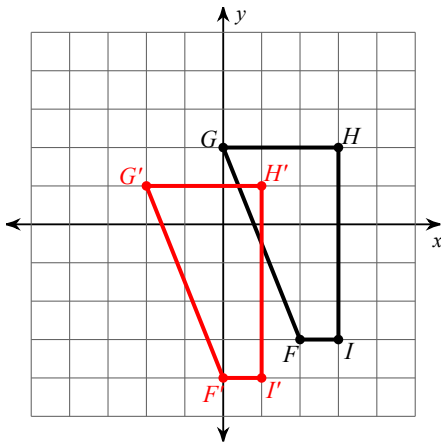
27)



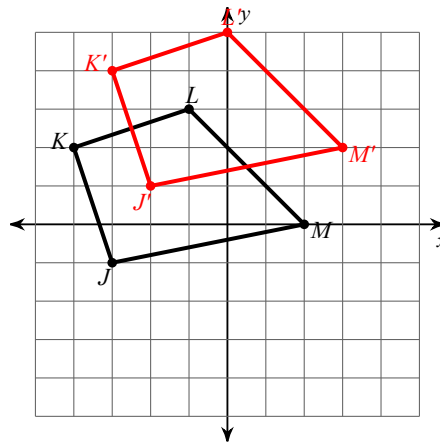
Translations CW

Graph the image of the figure using the transformation given.

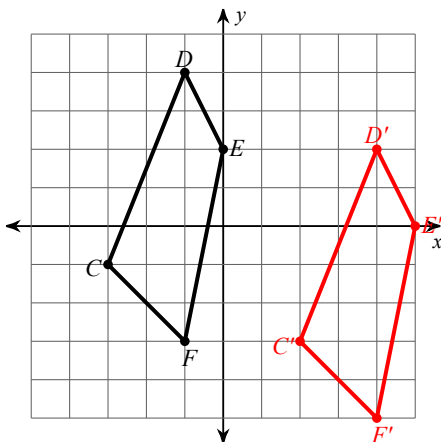
1) translation: 2 units left and 1 unit down



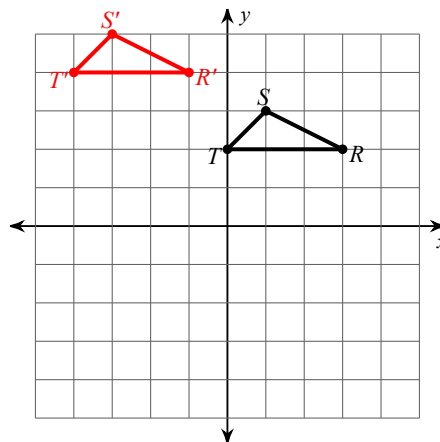
2) translation: 1 unit right and 2 units up



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

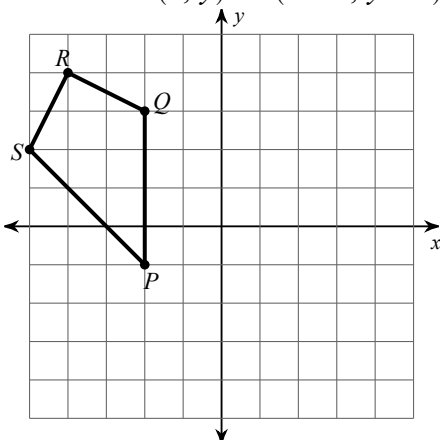


4) translation: $(x, y) \rightarrow (x - 4, y + 2)$



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

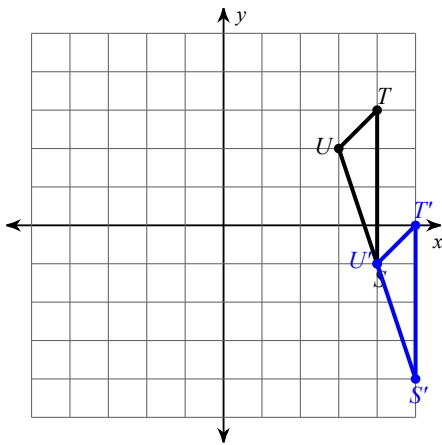
5) translation: $(x, y) \rightarrow (x + 4, y - 4)$



$S'(-1, -2), R'(0, 0), Q'(2, -1), P'(2, -5)$

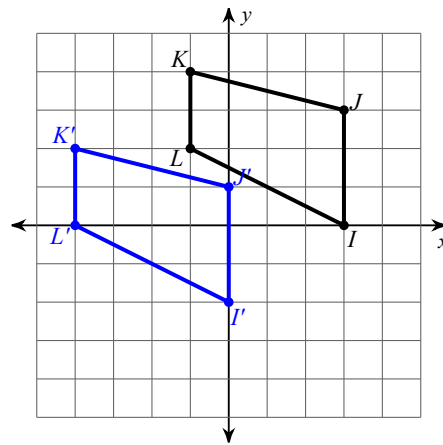
Write a rule to describe each transformation.

6)



translation: 1 unit right and 3 units down

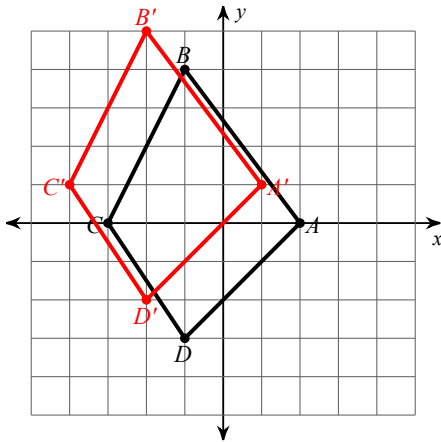
7)



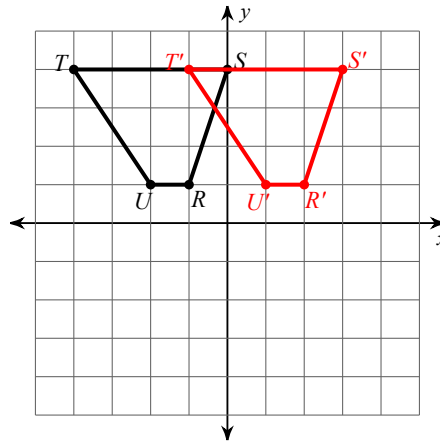
translation: 3 units left and 2 units down

Graph the image of the figure using the transformation given.

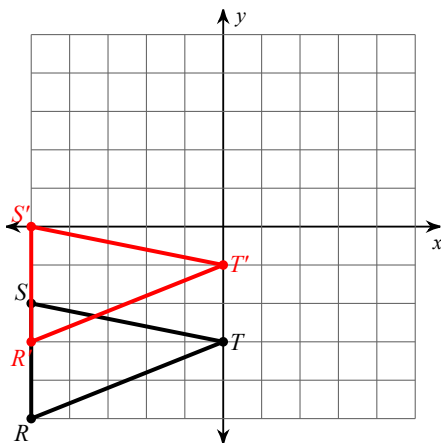
8) translation: 1 unit left and 1 unit up



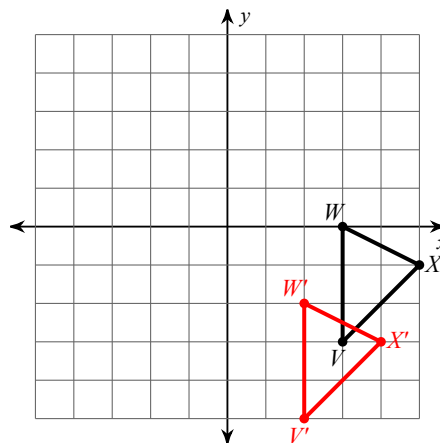
9) translation: 3 units right



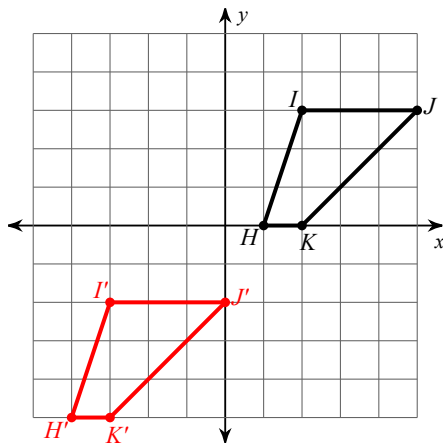
10) translation: 2 units up



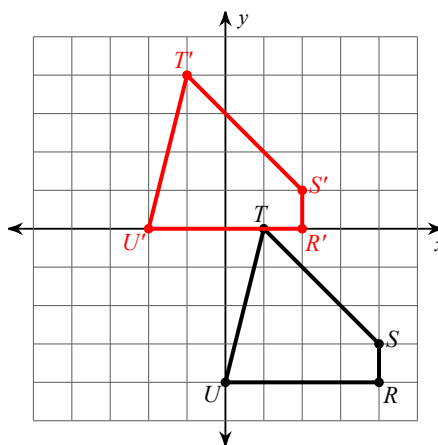
11) translation: 1 unit left and 2 units down



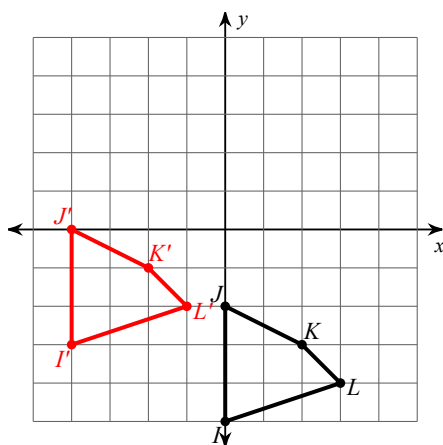
12) translation: 5 units left and 5 units down



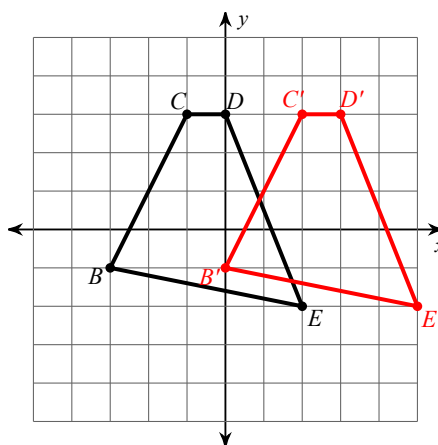
13) translation: $(x, y) \rightarrow (x - 2, y + 4)$



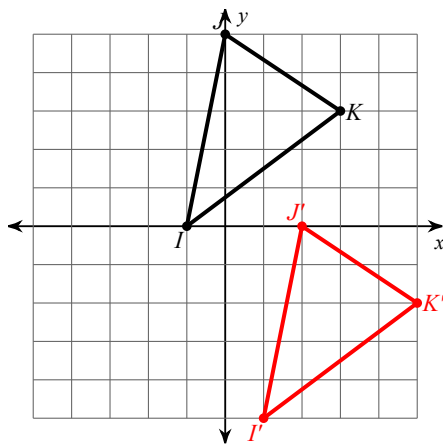
14) translation: $(x, y) \rightarrow (x - 4, y + 2)$



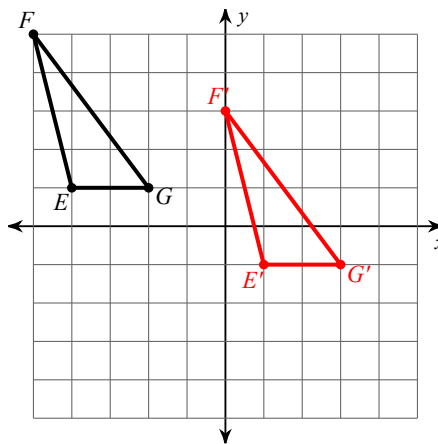
15) translation: $(x, y) \rightarrow (x + 3, y)$



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

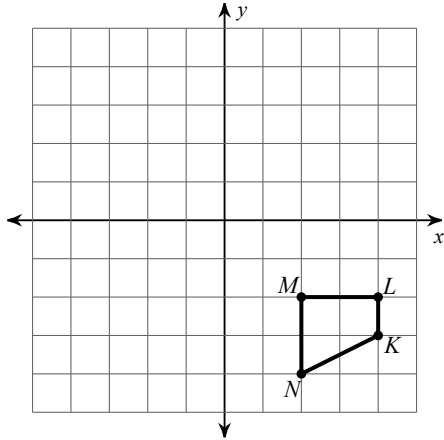


17) translation: $(x, y) \rightarrow (x + 5, y - 2)$



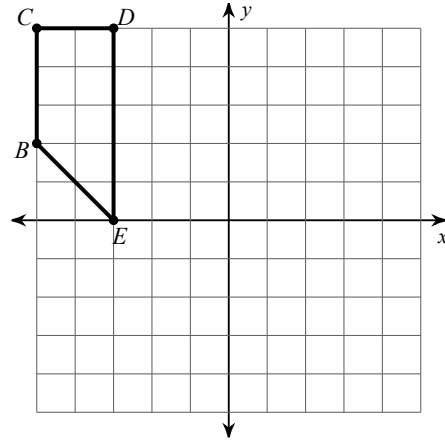
Find the coordinates of the vertices of each figure after the given transformation.

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



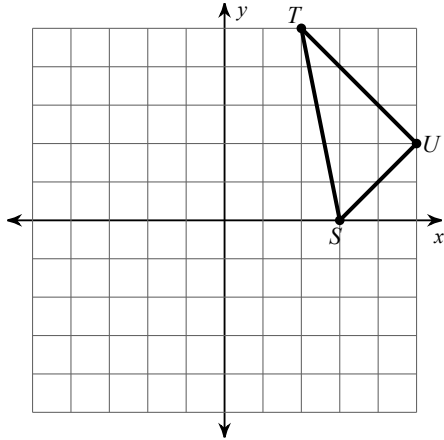
$N'(-3, -1), M'(-3, 1), L'(-1, 1), K'(-1, 0)$

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



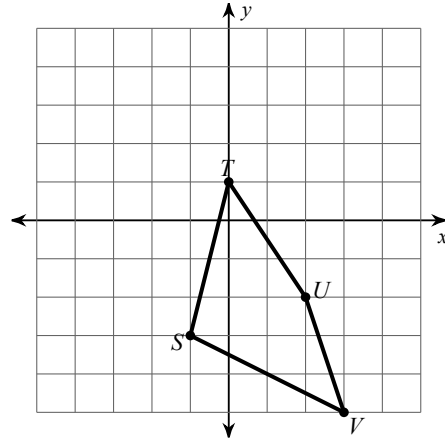
$B'(-3, -3), C'(-3, 0), D'(-1, 0), E'(-1, -5)$

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



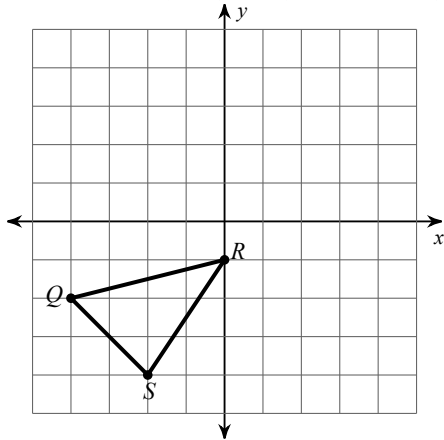
$S'(-3, -2), T'(-4, 3), U'(-1, 0)$

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



$S'(-5, -1), T'(-4, 3), U'(-2, 0), V'(-1, -3)$

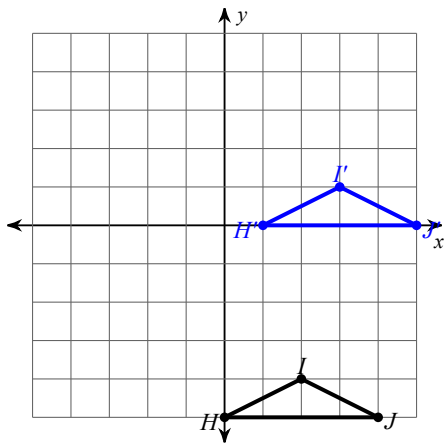
22) translation: $(x, y) \rightarrow (x + 2, y + 2)$



$Q'(-2, 0), R'(2, 1), S'(0, -2)$

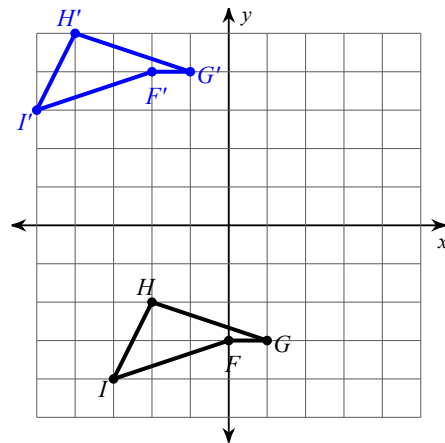
Write a rule to describe each transformation.

23)



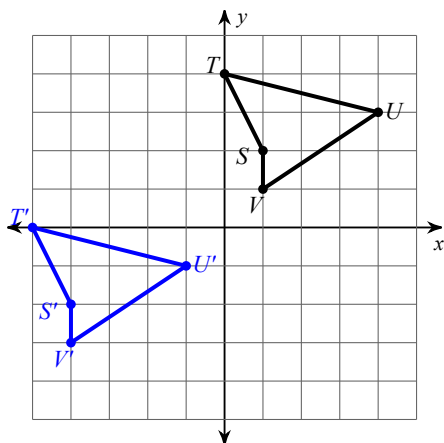
translation: $(x, y) \rightarrow (x + 1, y + 5)$

24)



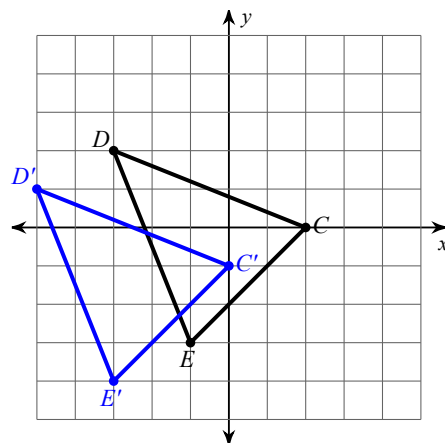
translation: $(x, y) \rightarrow (x - 2, y + 7)$

25)



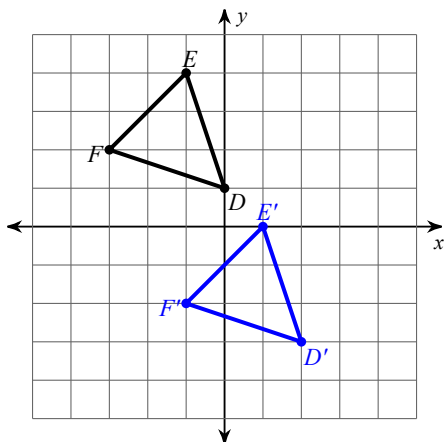
translation: $(x, y) \rightarrow (x - 5, y - 4)$

26)



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

27)



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