Math 1 Name_____

Unit 9.1 Translations EXAMPLE

Write a rule to describe each transformation.

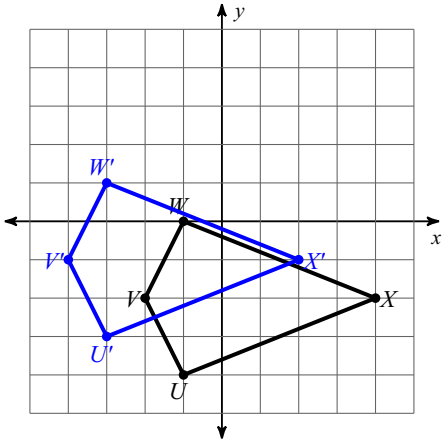
1) $D(-2, -2)$ to $D'(3, -5)$

2) $F(-1, 5)$ to $F'(1, -5)$

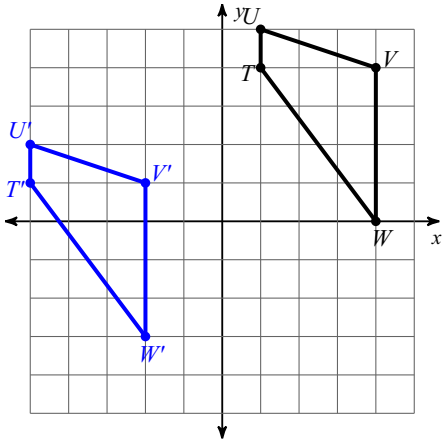
3) $G(-3, -3)$ to $G'(4, 4)$

4) $L(-4, -4)$ to $L'(-4, 4)$

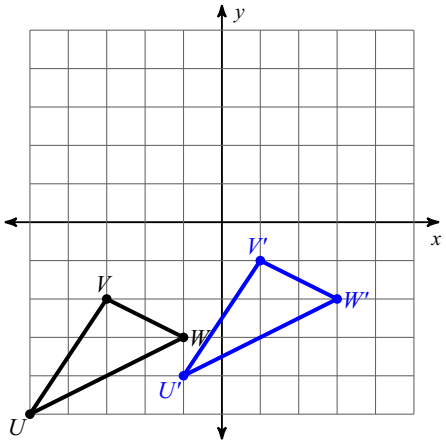
5)



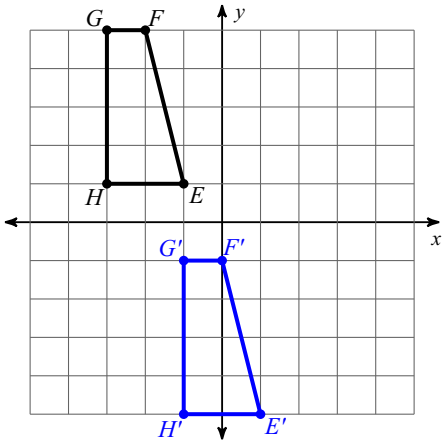
6)



7)

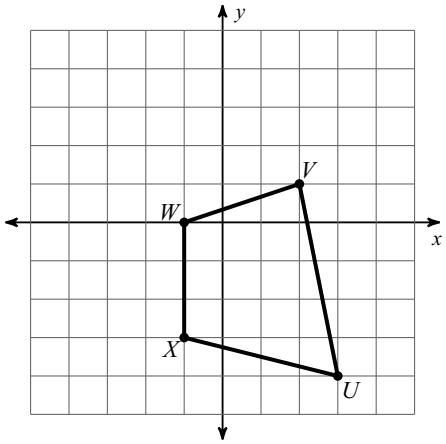


8)

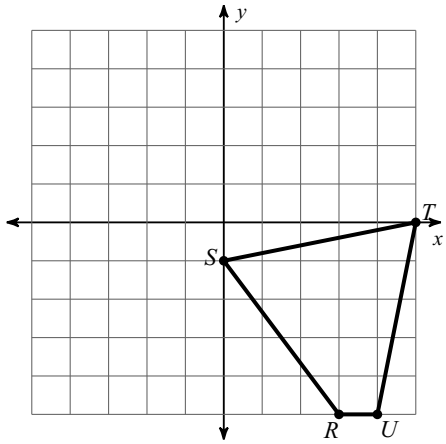


Graph the image of the figure using the transformation given.

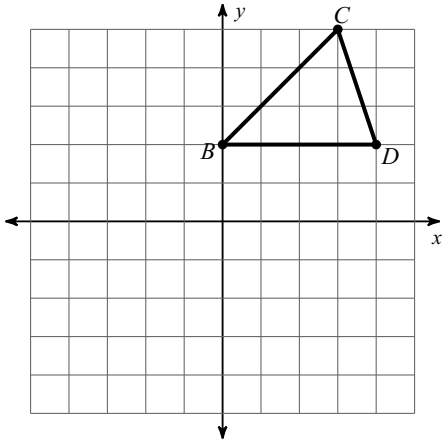
9) translation: $(x, y) \rightarrow (x - 3, y + 1)$



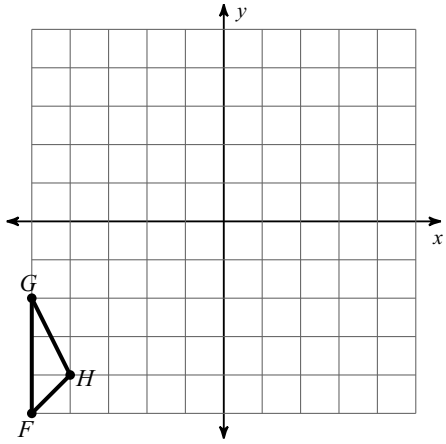
10) translation: $(x, y) \rightarrow (x, y + 1)$



11) translation: $(x, y) \rightarrow (x - 1, y - 6)$

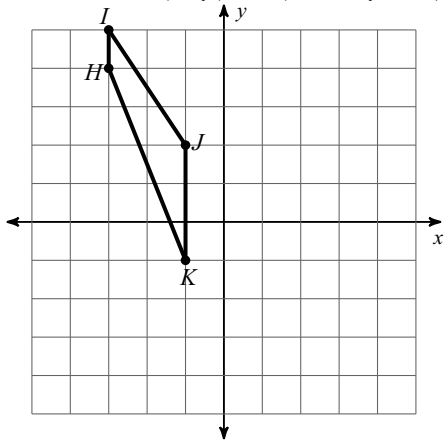


12) translation: $(x, y) \rightarrow (x + 1, y + 1)$

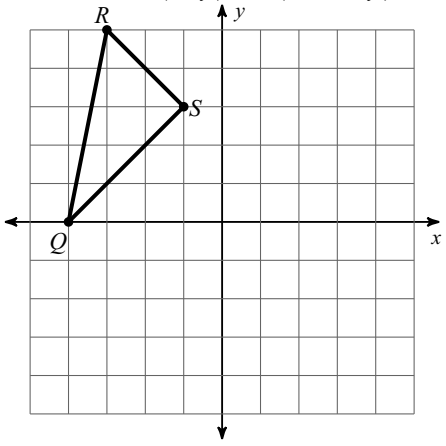


Find the coordinates of the vertices of each figure after the given transformation.

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



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



Math 1 Name_____

Unit 9.1 Translations EXAMPLE

Write a rule to describe each transformation.

1) $D(-2, -2)$ to $D'(3, -5)$

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

2) $F(-1, 5)$ to $F'(1, -5)$

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

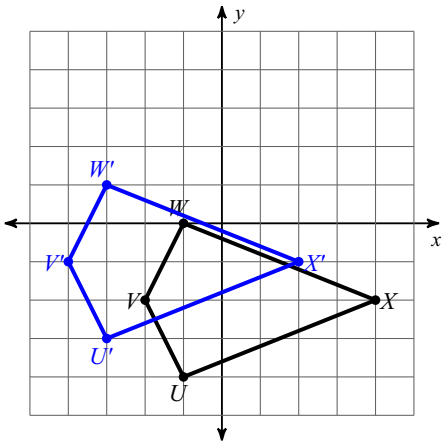
3) $G(-3, -3)$ to $G'(4, 4)$

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

4) $L(-4, -4)$ to $L'(-4, 4)$

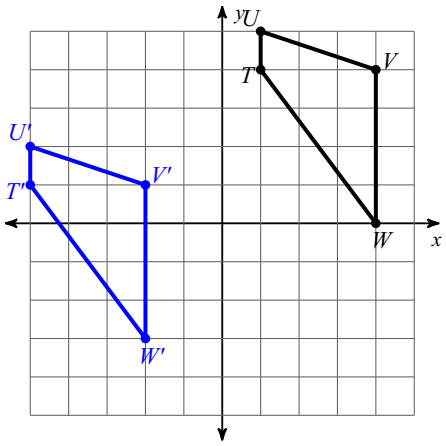
translation: $(x, y) \rightarrow (x, y + 8)$

5)



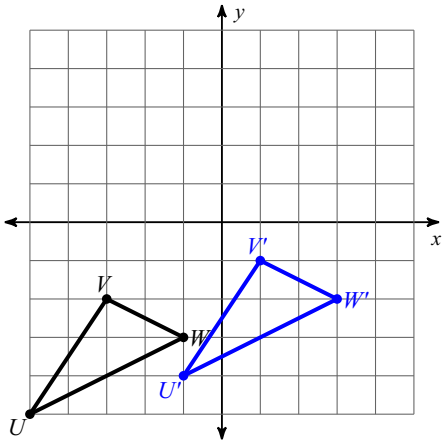
translation: $(x, y) \rightarrow (x - 2, y + 1)$

6)



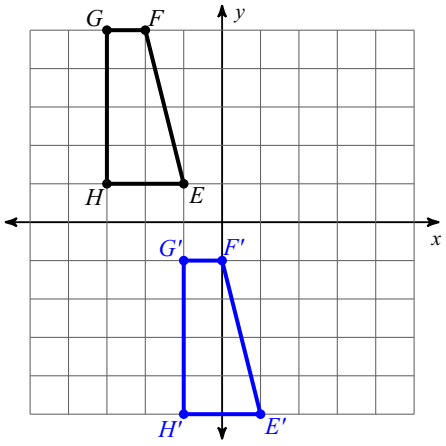
translation: $(x, y) \rightarrow (x - 6, y - 3)$

7)



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

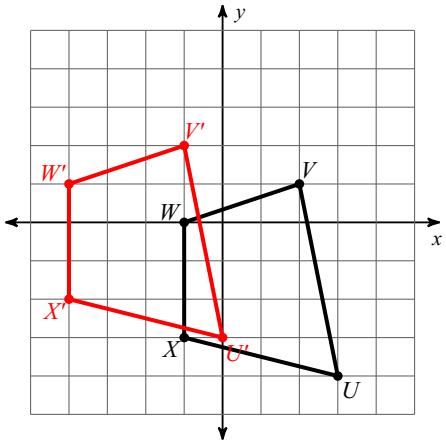
8)



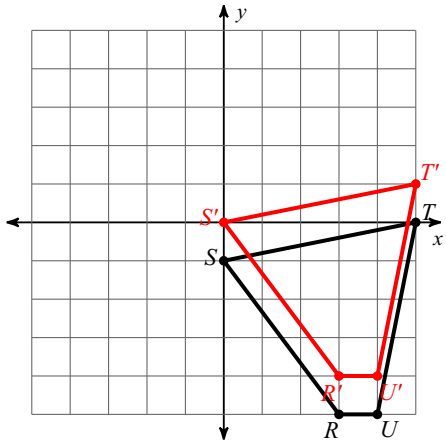
translation: $(x, y) \rightarrow (x + 2, y - 6)$

Graph the image of the figure using the transformation given.

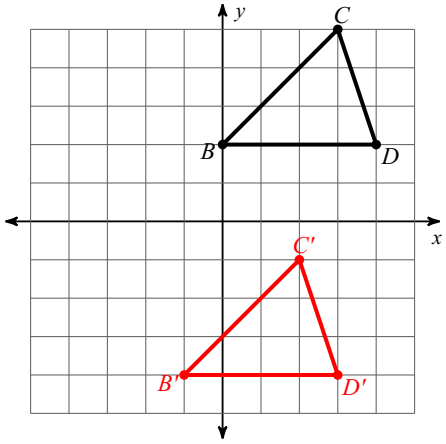
9) translation: $(x, y) \rightarrow (x - 3, y + 1)$



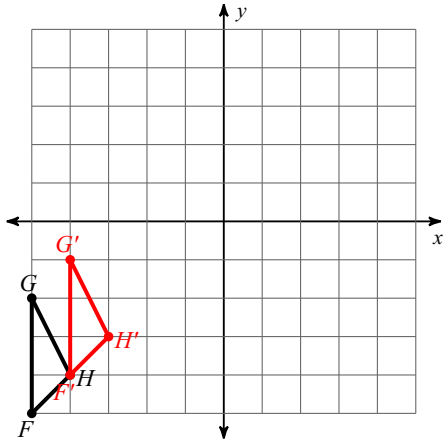
10) translation: $(x, y) \rightarrow (x, y + 1)$



11) translation: $(x, y) \rightarrow (x - 1, y - 6)$

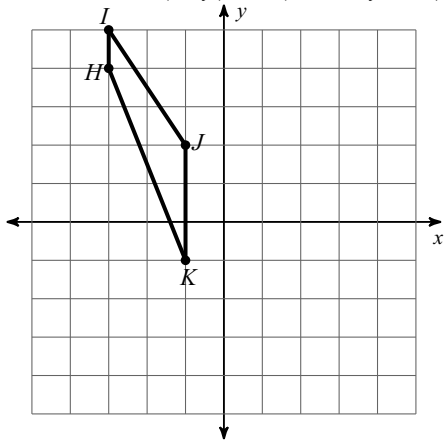


12) translation: $(x, y) \rightarrow (x + 1, y + 1)$



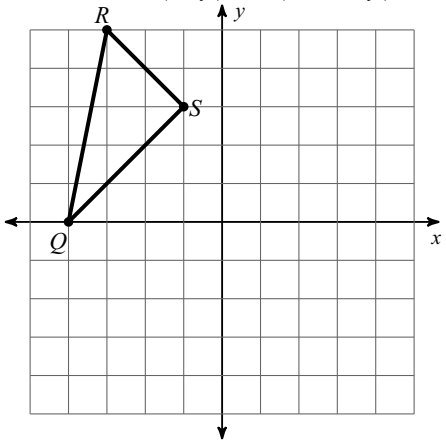
Find the coordinates of the vertices of each figure after the given transformation.

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



$H'(-2, 1), I'(-2, 2), J'(0, -1), K'(0, -4)$

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



$Q'(-1, 0), R'(0, 5), S'(2, 3)$