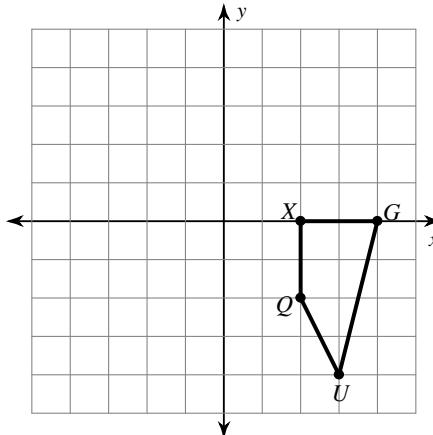


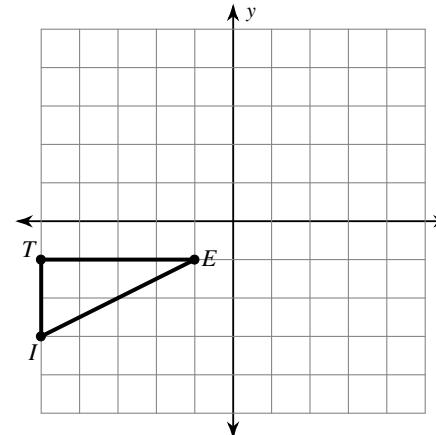
Name: _____

For 1 - 6, graph the image of the figure using the transformation given. Then label the vertices, and on a separate sheet of paper, write down the Pre-Image coordinates and the Image coordinates. Don't forget your "parentheses and commas" . . . (,)

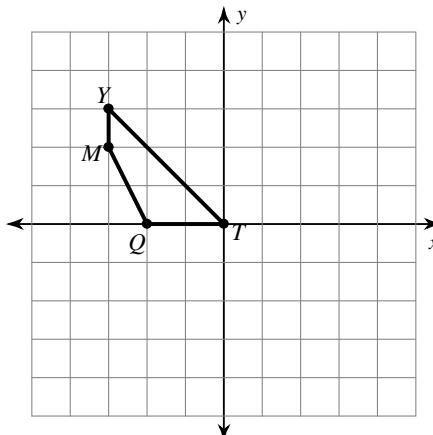
- 1) translation: 1 unit left



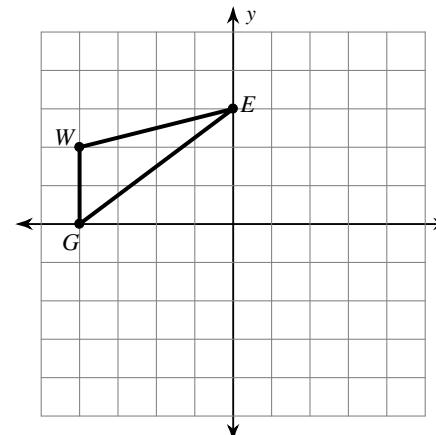
- 2) translation: 1 unit right and 2 units down



- 3) translation: 3 units right

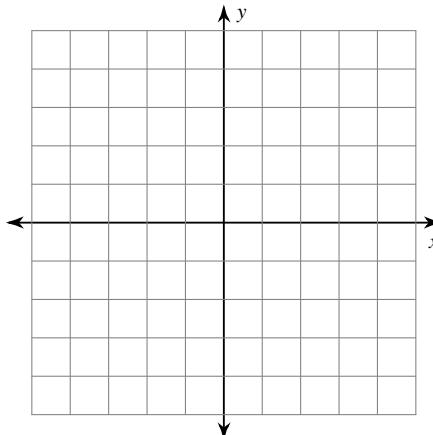


- 4) translation: 1 unit right and 2 units down



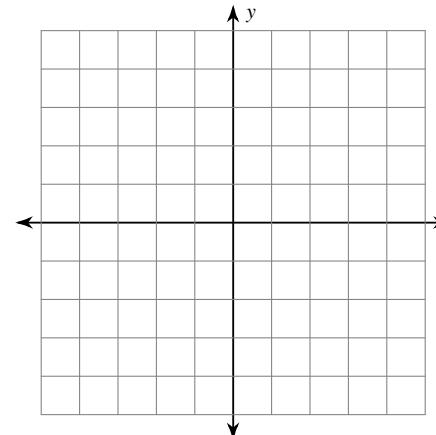
- 5) translation: 5 units up

$$U(-3, -4), M(-1, -1), L(-2, -5)$$



- 6) translation: 3 units up

$$R(-4, -3), D(-4, 0), L(0, 0), F(0, -3)$$



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

- 7) translation: 2 units left and 1 unit down
 $Q(0, -1), D(-2, 2), V(2, 4), J(3, 0)$

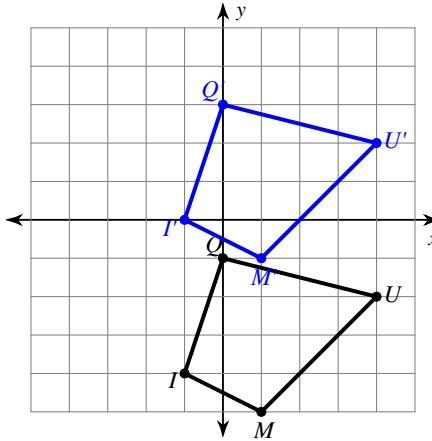
- 8) translation: 2 units down
 $D(-4, 1), A(-2, 5), S(-1, 4), N(-1, 2)$

- 9) translation: 4 units left and 4 units up
 $J(-1, -2), A(-1, 0), N(3, -3)$

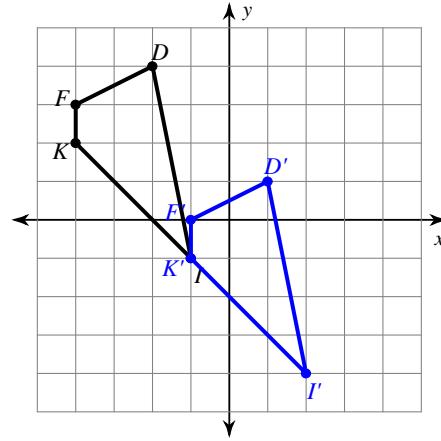
- 10) translation: 3 units right and 4 units up
 $Z(-4, -3), I(-2, -2), V(-2, -4)$

Write a rule to describe each transformation.

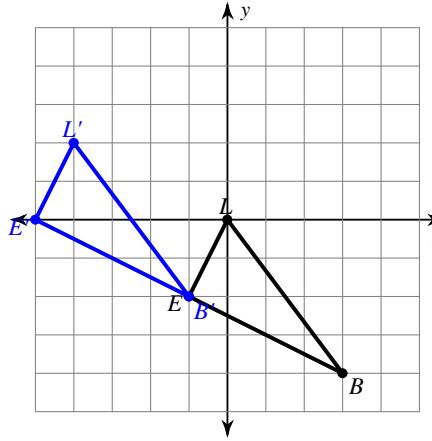
11)



12)



13)



14)

