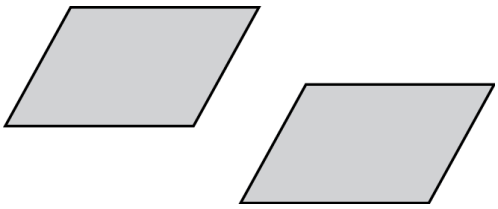
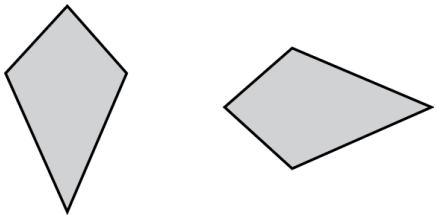
Name_____ Date_____

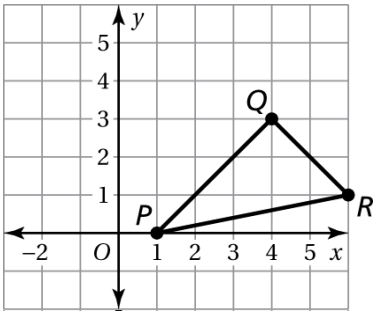
2.2 – Translations

Tell whether the right figure is a translation of the left figure. Explain.

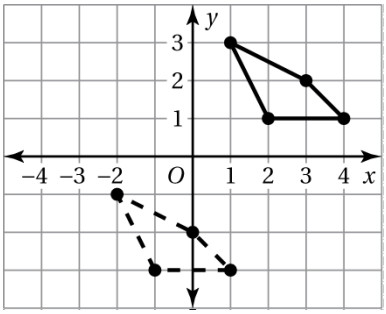
1) 

2) 

3) Translate the triangle 3 units left and 2 units up. What are the coordinates of the image?

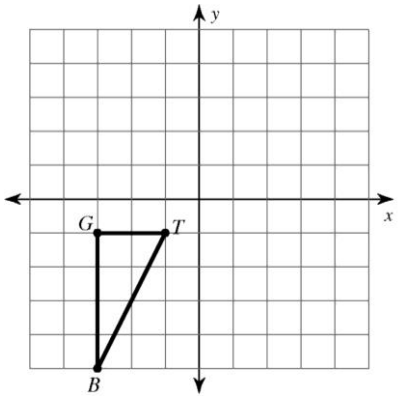


4) Describe ***in words*** the translation from the solid line figure to the dashed line figure.

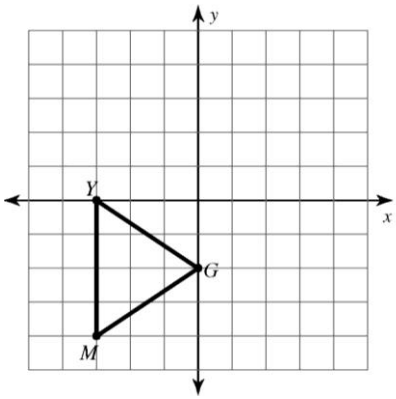


Graph the images according to the rule or the vector component. Label the new points correctly with its coordinates.

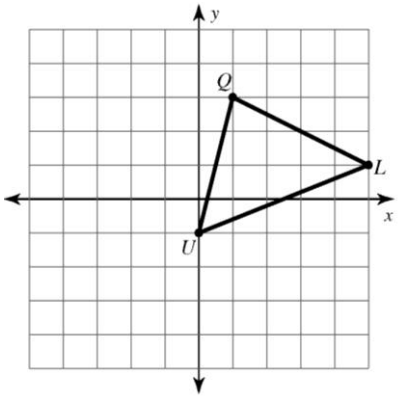
5) $(x, y) \rightarrow (x+5, y+1)$



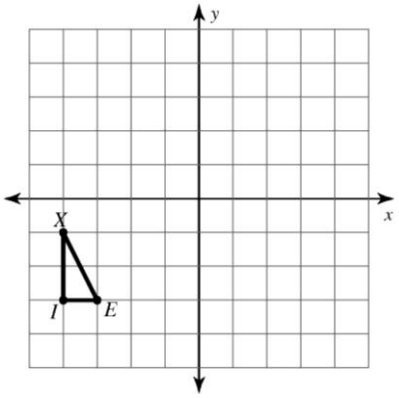
6) $(x, y) \rightarrow (x-1, y+2)$



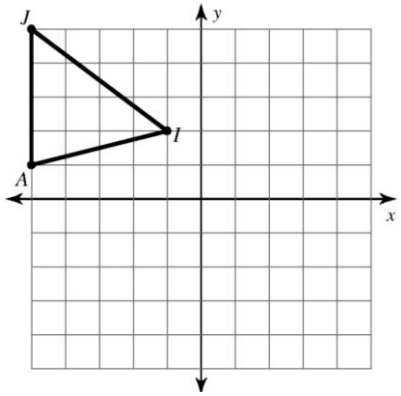
7) $(x, y) \rightarrow (x, y-3)$



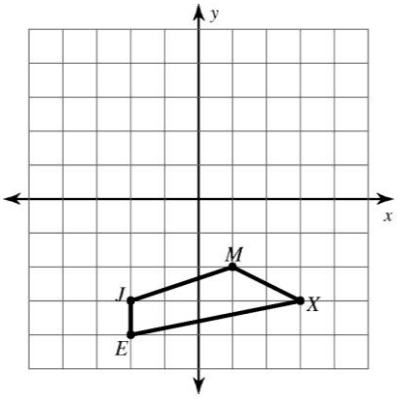
8) $(x, y) \rightarrow (x+5, y+2)$



9) $(x, y) \rightarrow (x+4, y-4)$



10) $(x, y) \rightarrow (x+2, y+3)$



Describe the translation of the point to its image.

11) $(1, 5) \rightarrow (-1, 1)$

12) $(-2, -3) \rightarrow (-2, 4)$

13) ΔXYZ has coordinates $X(2, 3)$, $Y(1, 4)$, and $Z(8, 9)$. A translation maps X to X' $(4, 7)$. What are the coordinates for Y' and Z' for this translation?