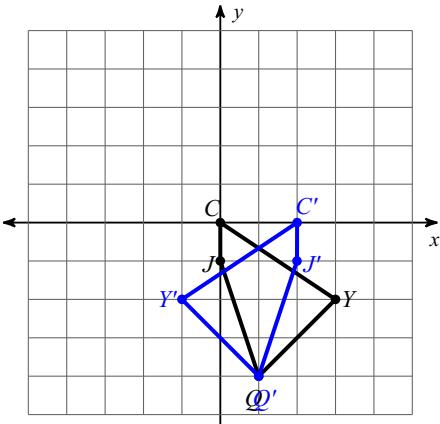


## Reflections, Rotations, &amp; Translations HW#3

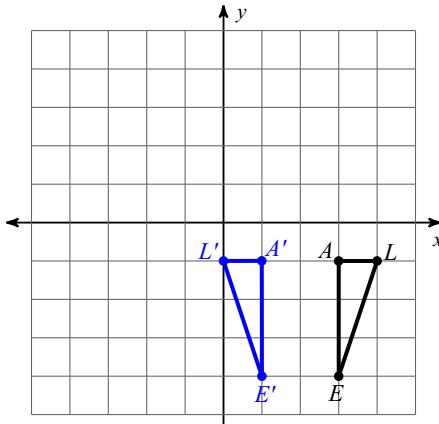
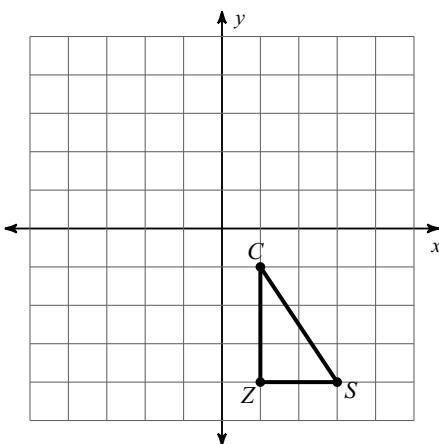
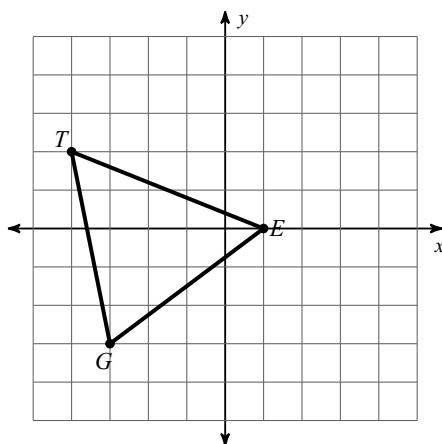
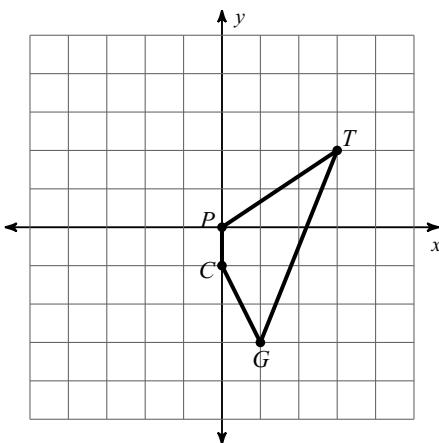
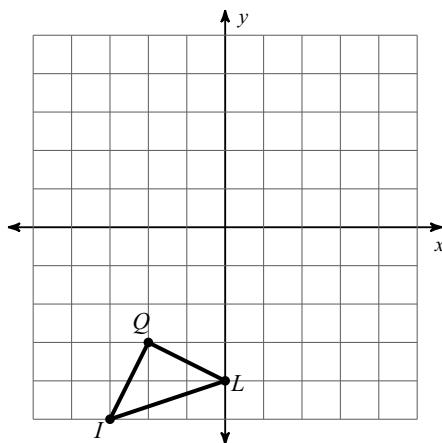
Date \_\_\_\_\_ Hr \_\_\_\_\_ Day \_\_\_\_\_

**Write a rule to describe each transformation.**

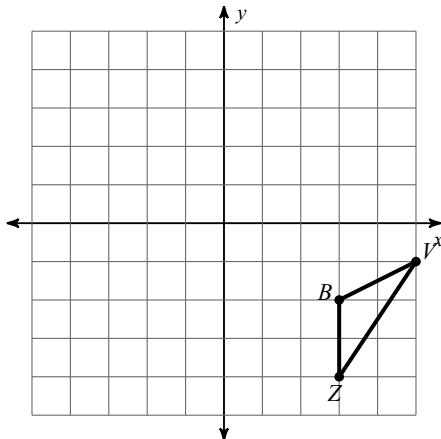
1)



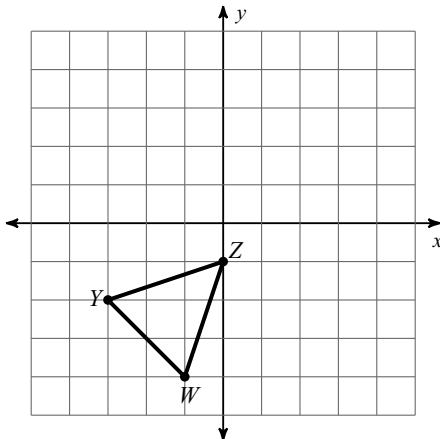
2)

**Graph the image of the figure using the transformation given.**3) reflection across  $y = x$ 4) reflection across  $y = -1$ 5) reflection across  $y = 1$ 6) reflection across  $y = -x$ 

- 7) rotation  $90^\circ$  clockwise about the origin

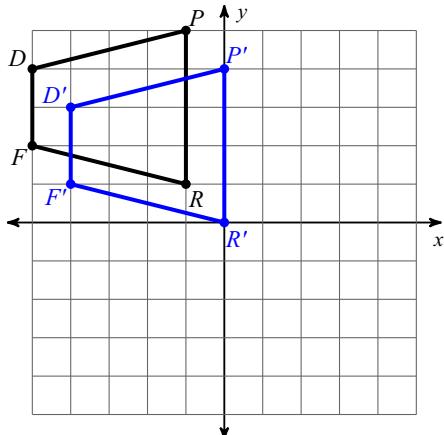


- 8) rotation  $180^\circ$  about the origin

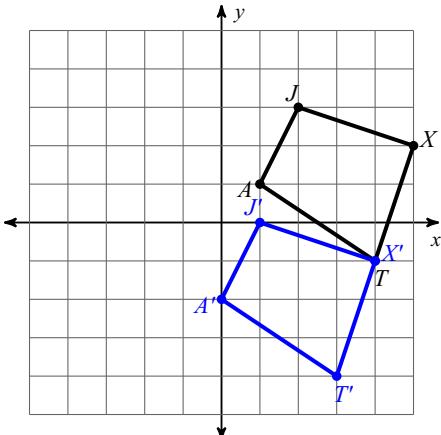


**Write a rule to describe each transformation.**

- 9)

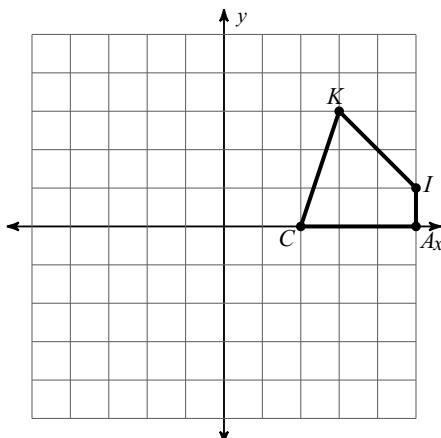


- 10)

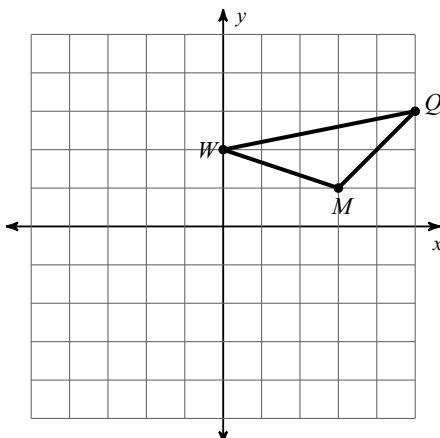


**Graph the image of the figure using the transformation given.**

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



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

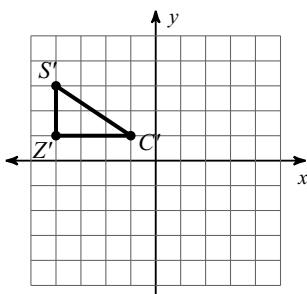


# Answers to Reflections, Rotations, & Translations HW#3 (ID: 1)

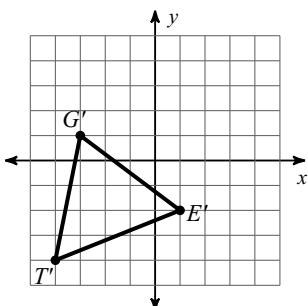
1) reflection across  $x = 1$

2) reflection across  $x = 2$

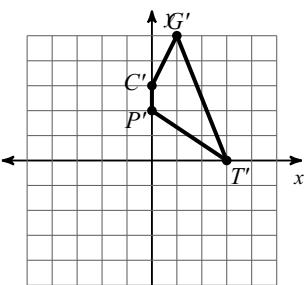
3)



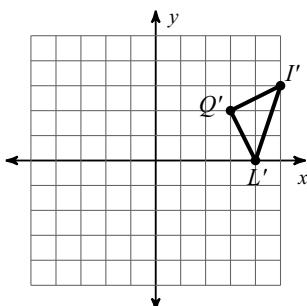
4)



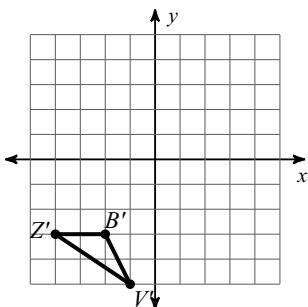
5)



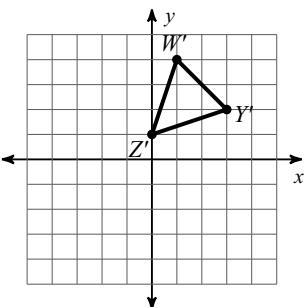
6)



7)

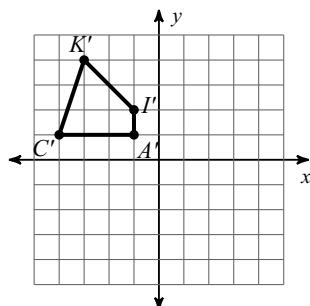


8)

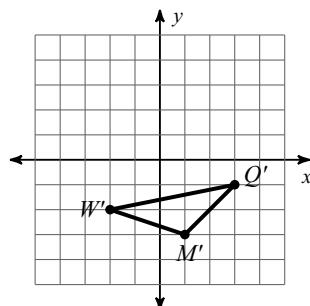


9) translation: 1 unit right and 1 unit down

11)



12)



10) translation: 1 unit left and 3 units down