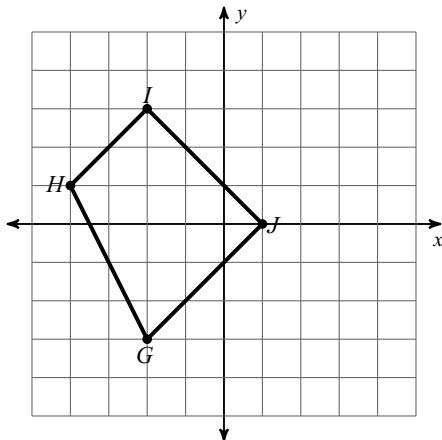


## Translations HW#1

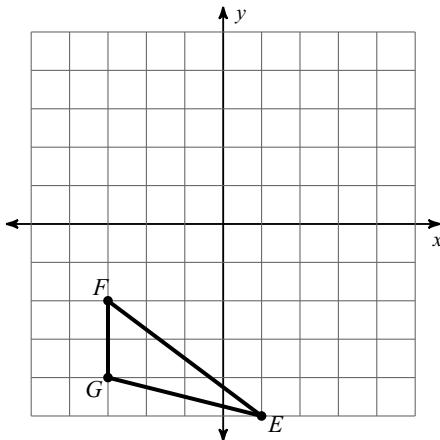
Date \_\_\_\_\_ Hour \_\_\_\_\_

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

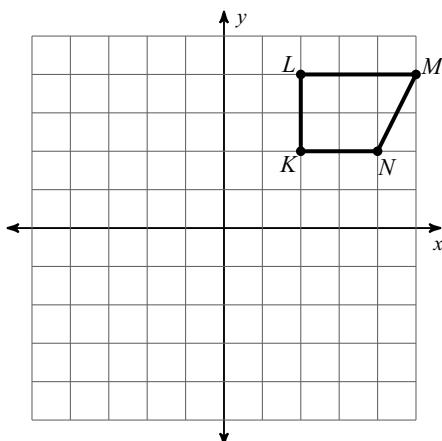
- 1) translation: 4 units right and 1 unit up



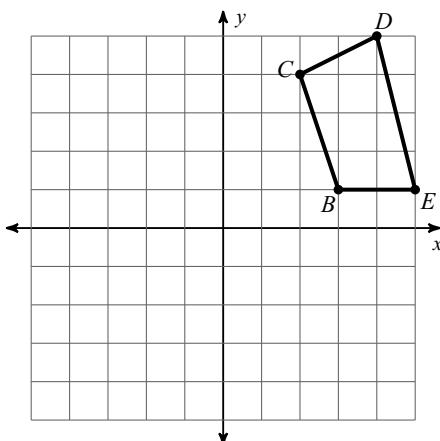
- 2) translation: 1 unit right and 5 units up



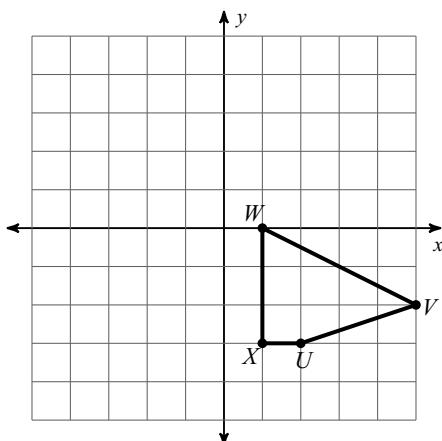
- 3) translation:
- $(x, y) \rightarrow (x - 7, y + 1)$



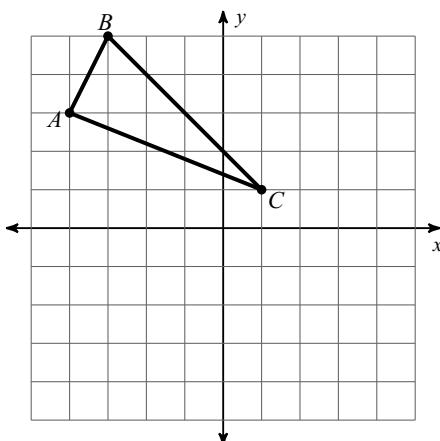
- 4) translation:
- $(x, y) \rightarrow (x, y - 5)$



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



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



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

7) translation:  $(x, y) \rightarrow (x - 4, y + 2)$   
 $W(3, -1)$

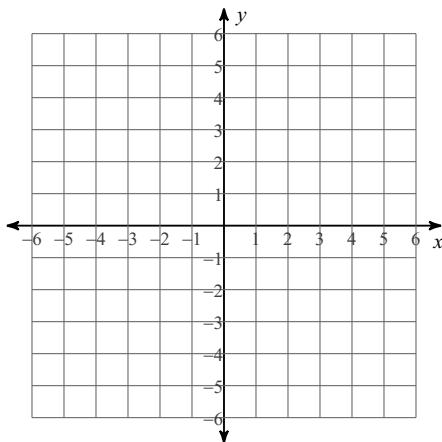
- A)  $W'(-3, 1)$       B)  $W'(2, 4)$   
C)  $W'(3, 1)$       D)  $W'(-1, 1)$

8) translation:  $(x, y) \rightarrow (x - 1, y - 2)$   
 $H(0, 0)$

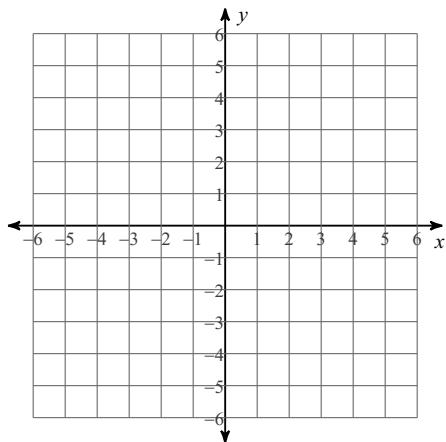
- A)  $H'(-2, 5)$       B)  $H'(-1, 4)$   
C)  $H'(-4, -5)$       D)  $H'(-1, -2)$

**Sketch the graph of each line.**

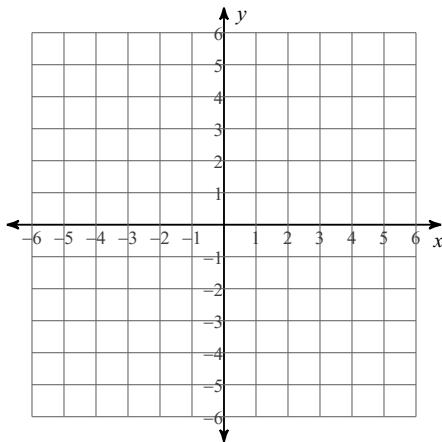
9)  $x = 1$



10)  $x + y = -1$



11)  $x - 2y = 4$



12)  $2x - 3y = -3$

