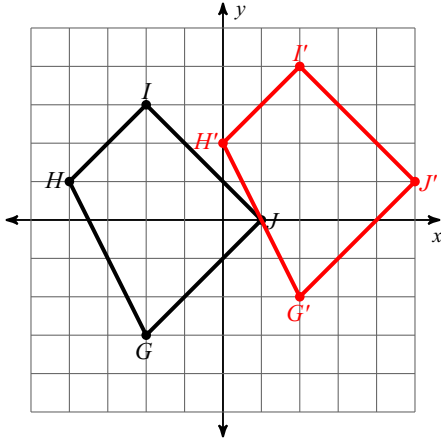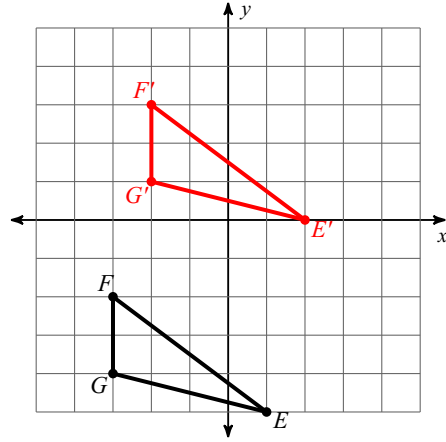Geometry
Name_____ ID: 1

Translations HW#1

Date_____ Hour____

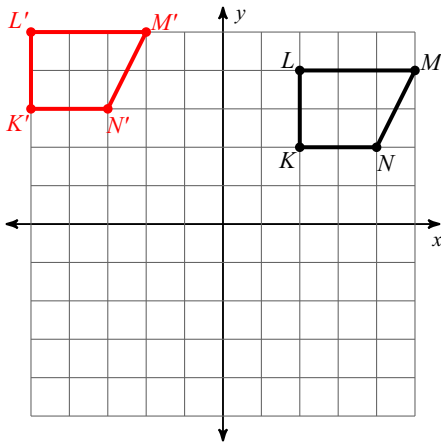**Graph the image of the figure using the transformation given.**

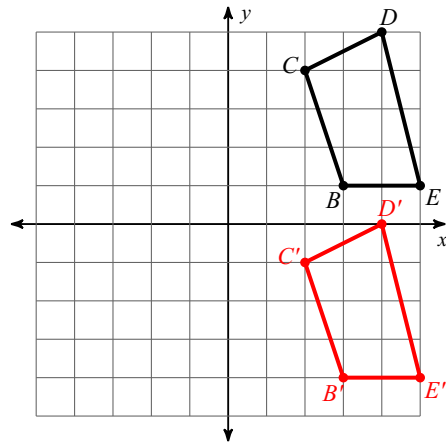1) translation: 4 units right and 1 unit up

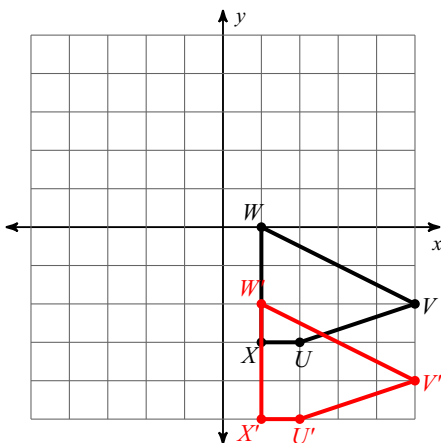
2) translation: 1 unit right and 5 units up
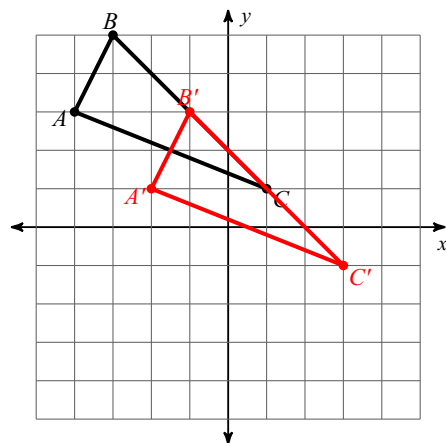

3) translation: $(x,\,y) \rightarrow (x - 7,\, y + 1)$

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: $(x, y) \rightarrow (x - 4, y + 2)$
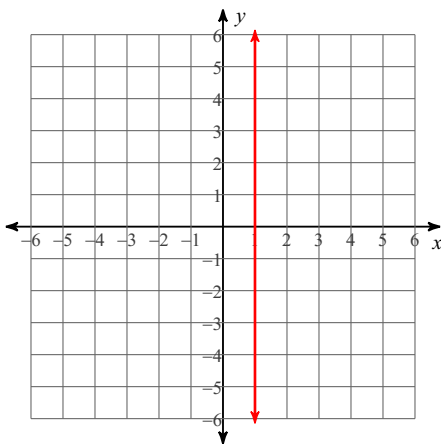 $W(3, -1)$
   A) $W'(-3, 1)$ B) $W'(2, 4)$
   C) $W'(3, 1)$ *D) $W'(-1, 1)$

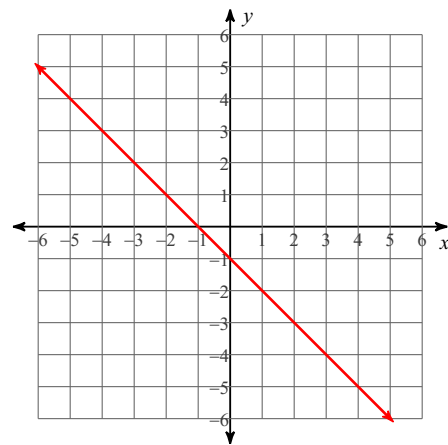8) translation: $(x, y) \rightarrow (x - 1, y - 2)$
   $H(0, 0)$
   A) $H'(-2, 5)$ B) $H'(-1, 4)$
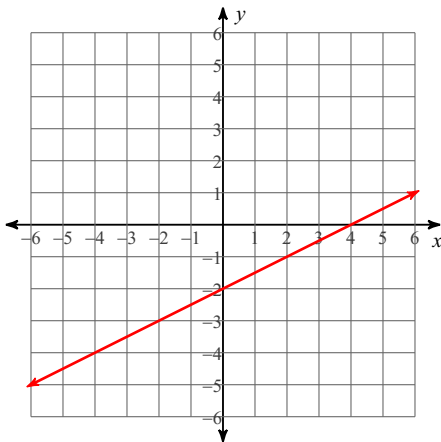   C) $H'(-4, -5)$ *D) $H'(-1, -2)$

Sketch the graph of each line.

9) $x = 1$

10) $x + y = -1$

11) $x - 2y = 4$

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

-2-