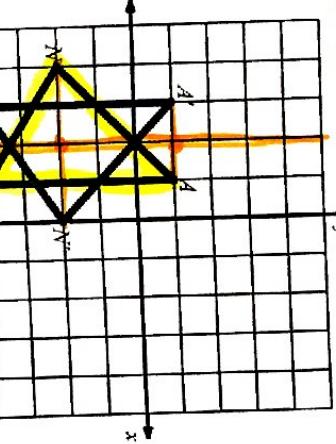


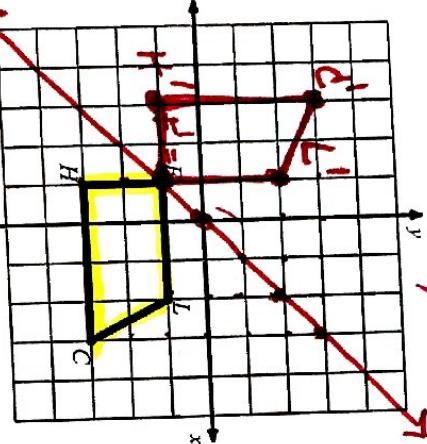
Write a rule to describe each transformation.

1) **Refle. $x = -2$**

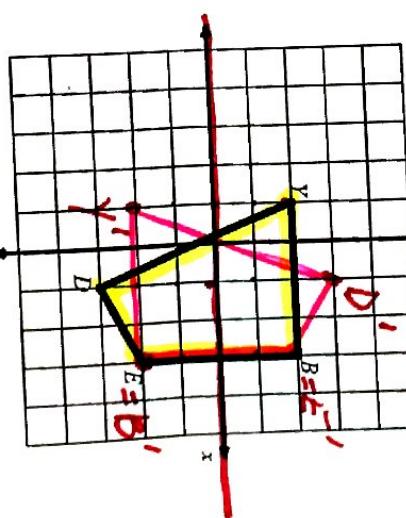


Graph the image of the figure using the transformation given.

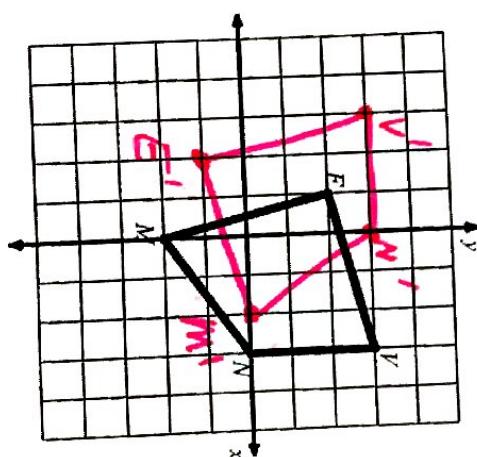
3) reflection across $y = \frac{1}{2}x + 0$



4) reflection across the x-axis

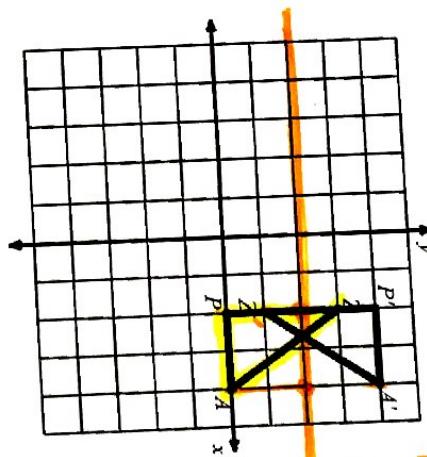


5) rotation 180° about the origin

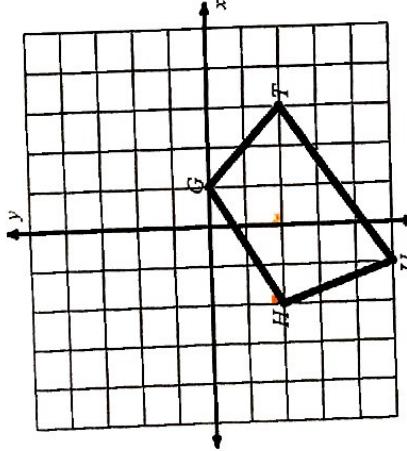


6) rotation 90° counterclockwise about the origin

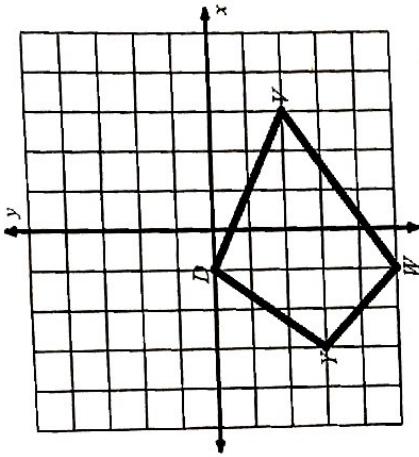
Refle. $y = 2$



7) rotation 90° clockwise about the origin



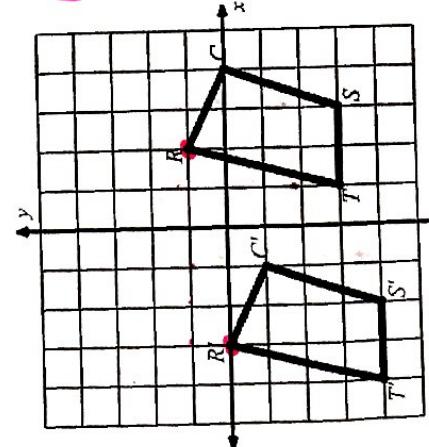
8) rotation 180° about the origin



Write a rule to describe each transformation in vector notation

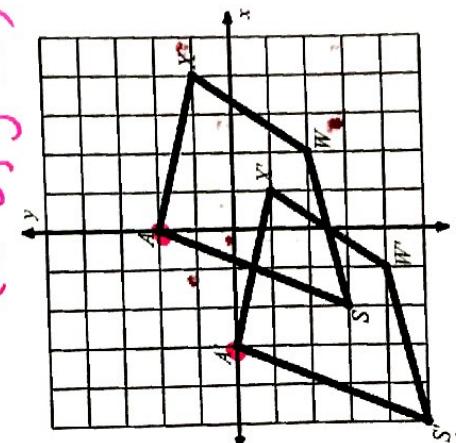
$$(x-3, y-2)$$

10)



9)

$$(x-5, y-1)$$

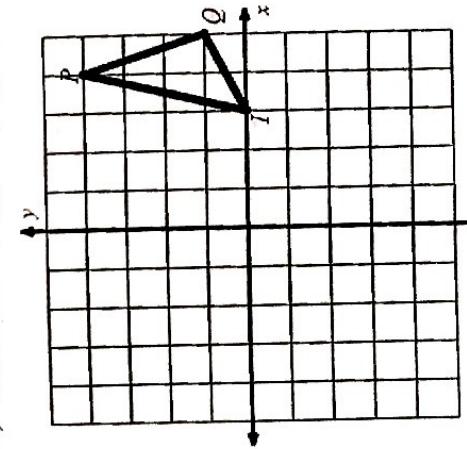
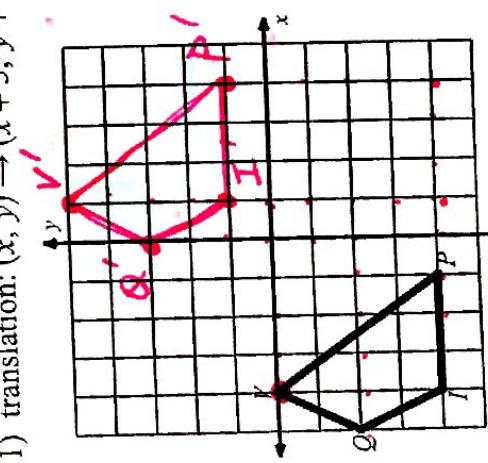


left down

Graph the image of the figure using the transformation given.

11) translation: $(x, y) \rightarrow (x + 5, y + 5)$

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



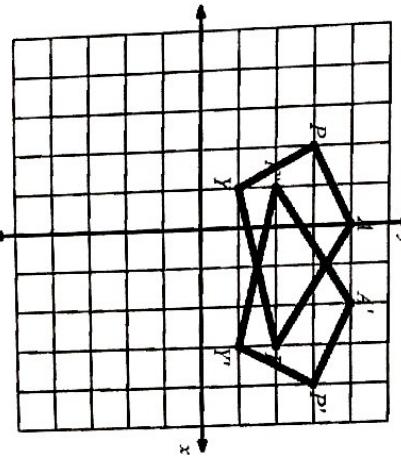
Reflections, Rotations, & Translations HW#1

Date _____ Hr _____ Day _____

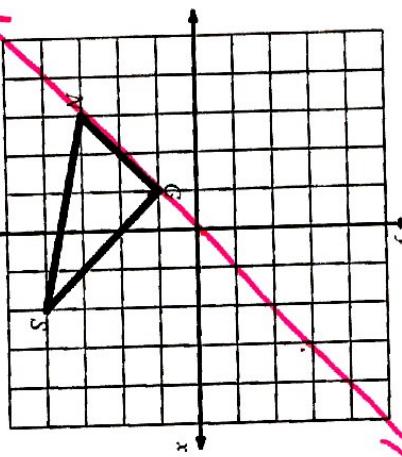
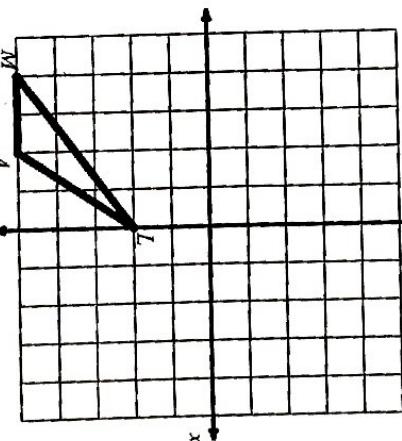
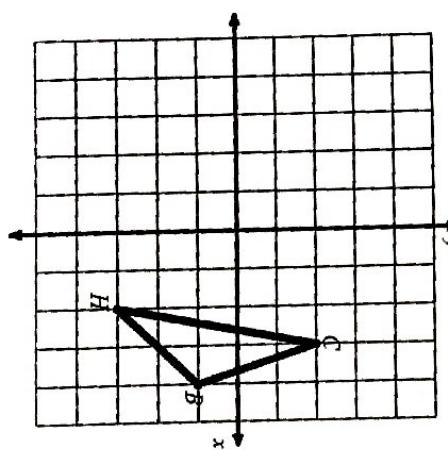
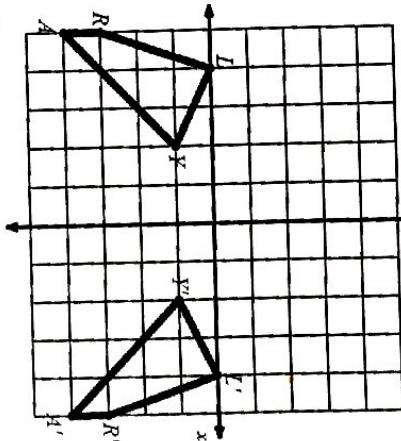
Write a rule to describe each transformation.

ODDS

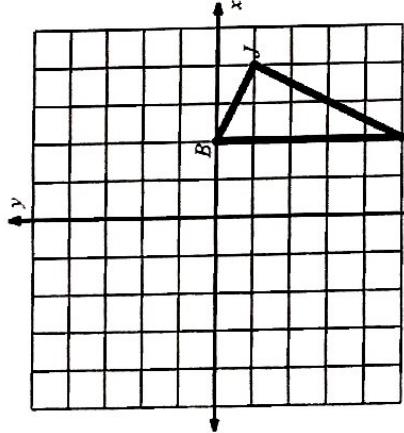
1)



Graph the image of the figure using the transformation given.

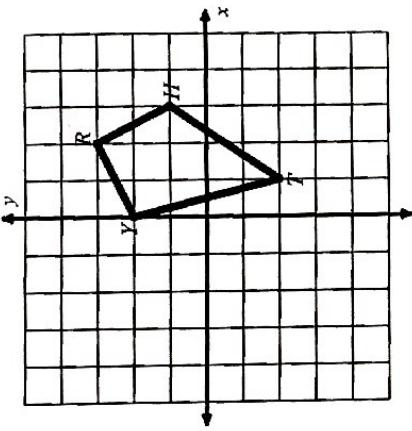
3) reflection across $y = x$ 4) reflection across $y = -1$ 5) reflection across $y = 2$ 6) reflection across $y = x$ 

- 7) rotation 90° counterclockwise about the origin

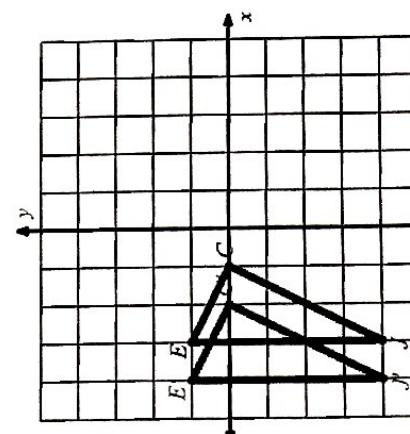


Write a rule to describe each transformation.

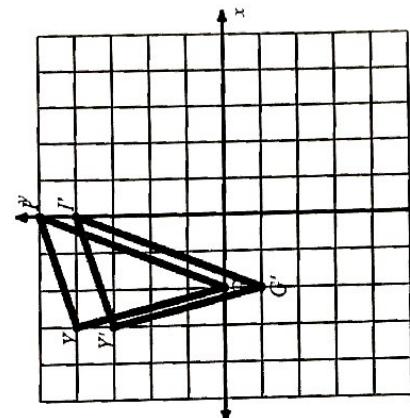
- 8) rotation 180° about the origin



9)



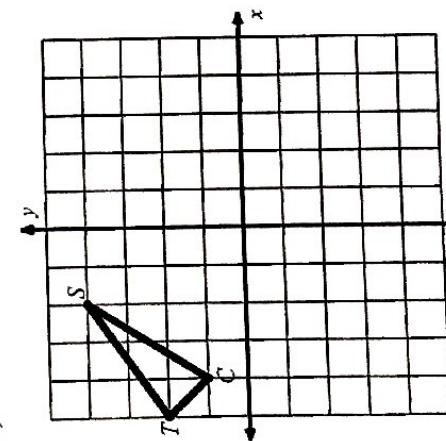
10)



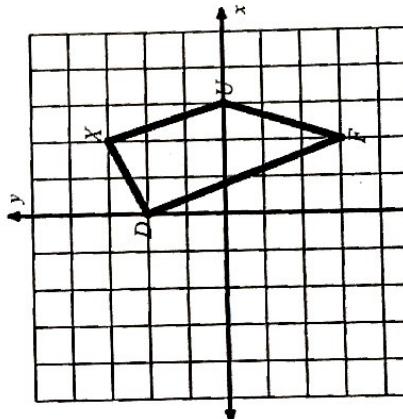
Graph the image of the figure using the transformation given.

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

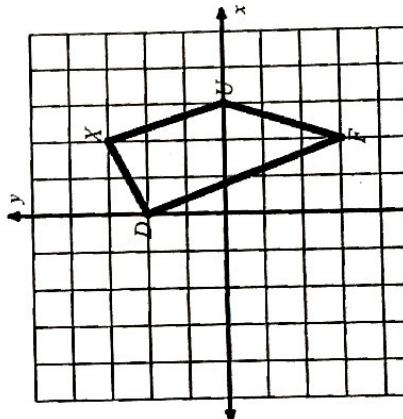
- 12) translation: $(x, y) \rightarrow (x - 2, y + 1)$



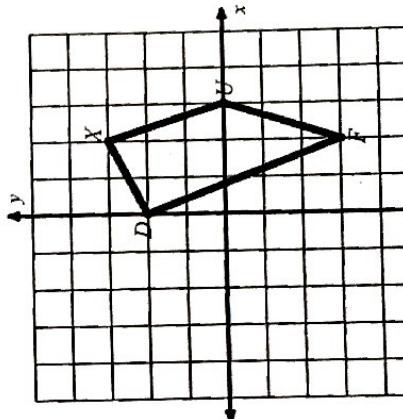
13) $T(x, y) \rightarrow (x - 1, y + 1)$



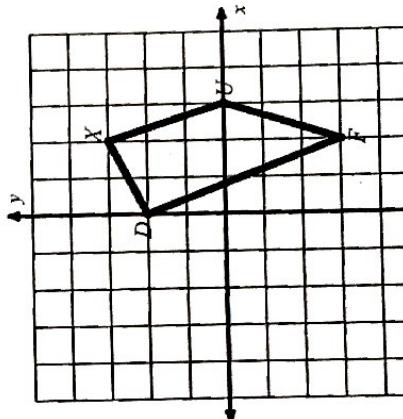
14) $T(x, y) \rightarrow (x + 2, y - 1)$



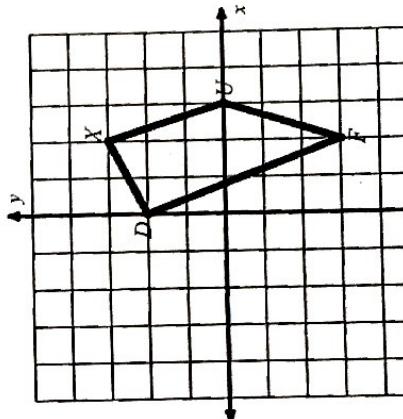
15) $T(x, y) \rightarrow (x - 1, y + 2)$



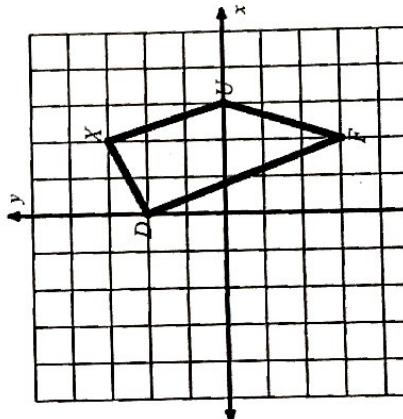
16) $T(x, y) \rightarrow (x + 2, y - 2)$



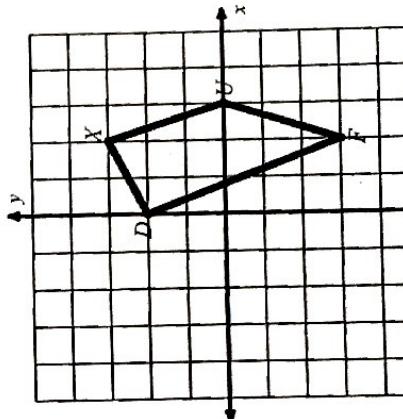
17) $T(x, y) \rightarrow (x - 1, y + 3)$



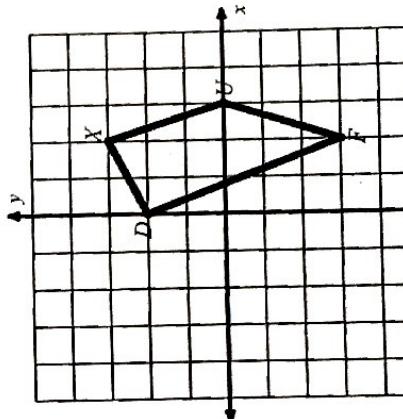
18) $T(x, y) \rightarrow (x + 3, y - 3)$



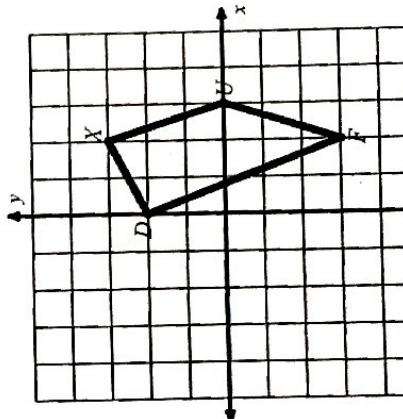
19) $T(x, y) \rightarrow (x - 2, y + 4)$



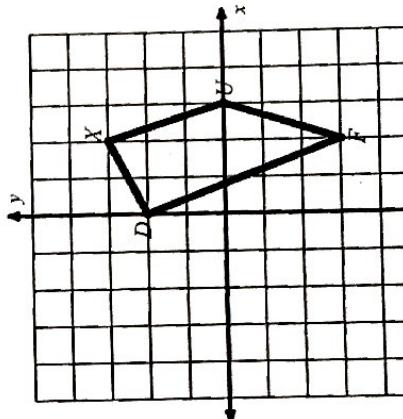
20) $T(x, y) \rightarrow (x + 4, y - 4)$



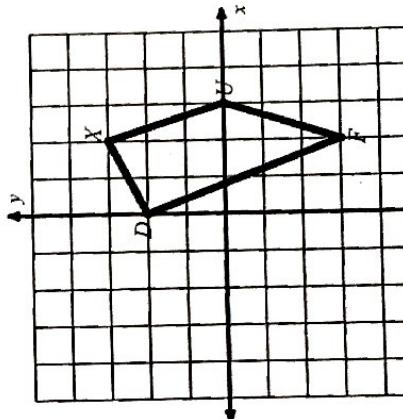
21) $T(x, y) \rightarrow (x - 3, y + 5)$



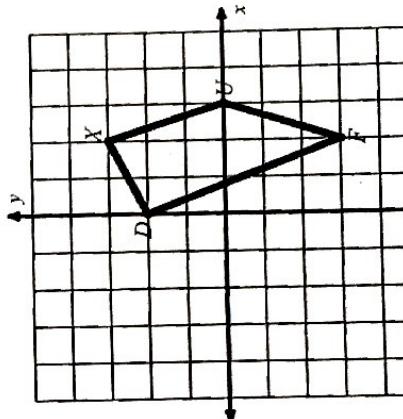
22) $T(x, y) \rightarrow (x + 5, y - 5)$



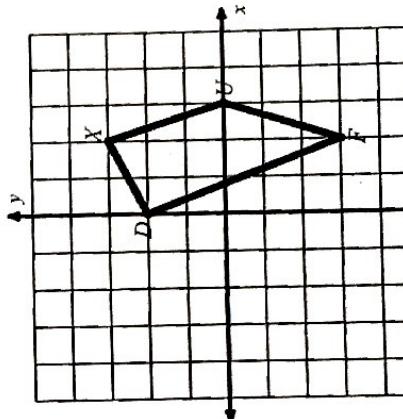
23) $T(x, y) \rightarrow (x - 4, y + 6)$



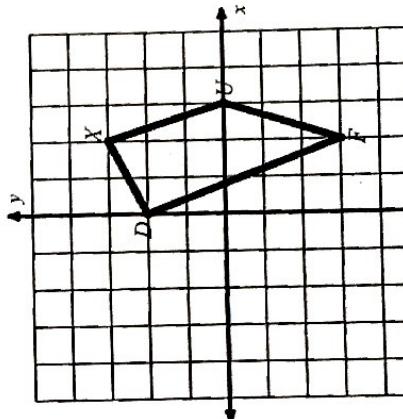
24) $T(x, y) \rightarrow (x + 6, y - 6)$



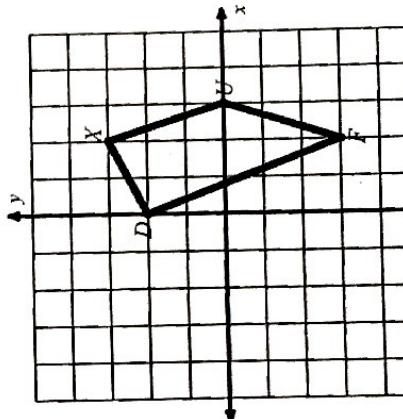
25) $T(x, y) \rightarrow (x - 5, y + 7)$



26) $T(x, y) \rightarrow (x + 7, y - 7)$



27) $T(x, y) \rightarrow (x - 6, y + 8)$



28) $T(x, y) \rightarrow (x + 8, y - 8)$

