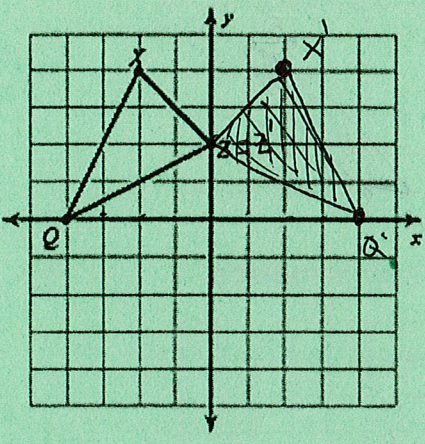


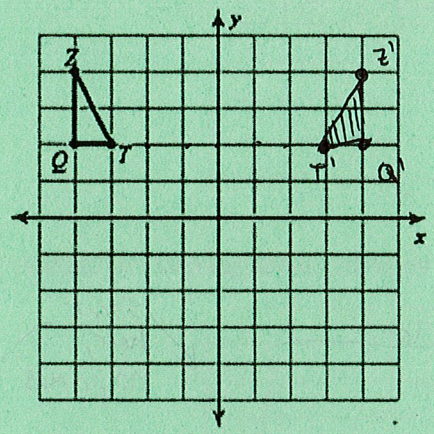
## Practice- Reflections

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

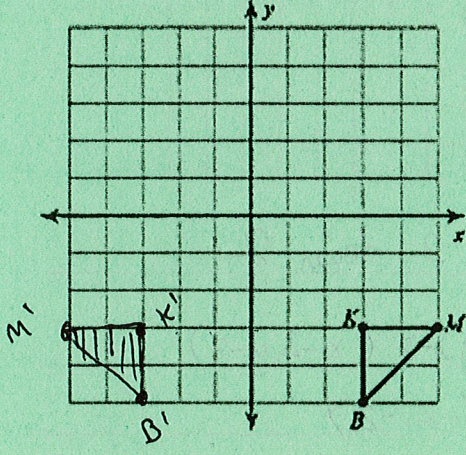
**1) reflection across the y-axis**



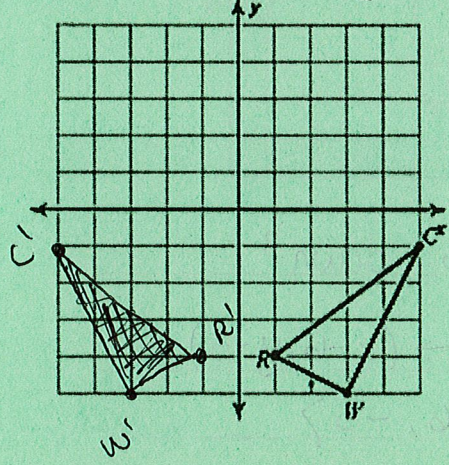
**2) reflection across the y-axis**



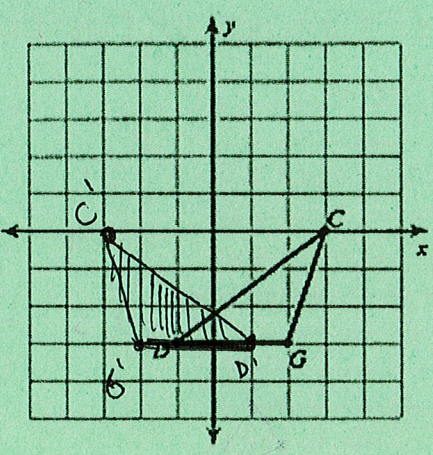
**3) reflection across the y-axis**



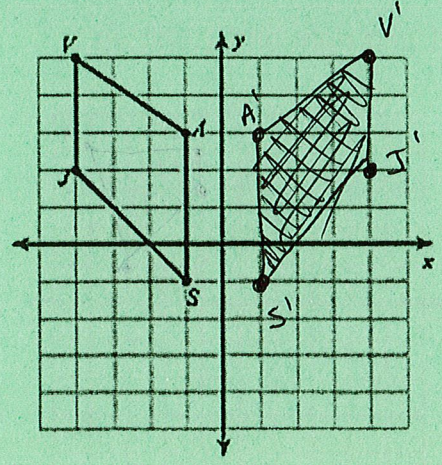
**4) reflection across the y-axis**



**5) reflection across the y-axis**

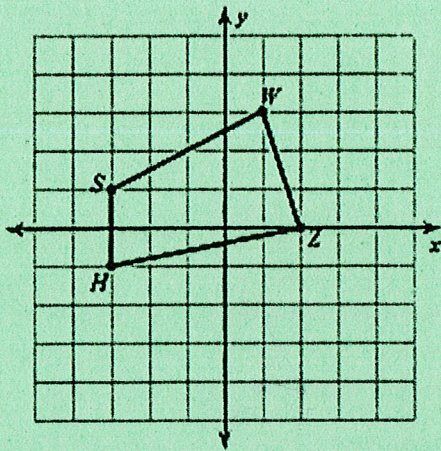


**6) reflection across the y-axis**

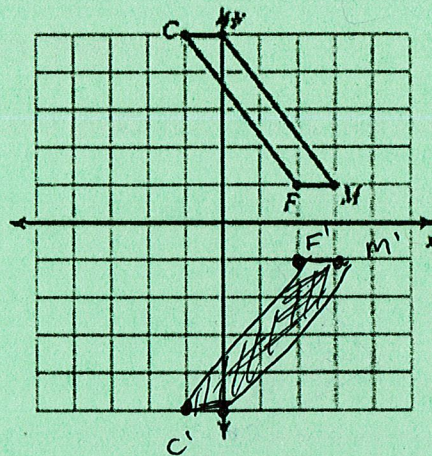




7) reflection across the y-axis

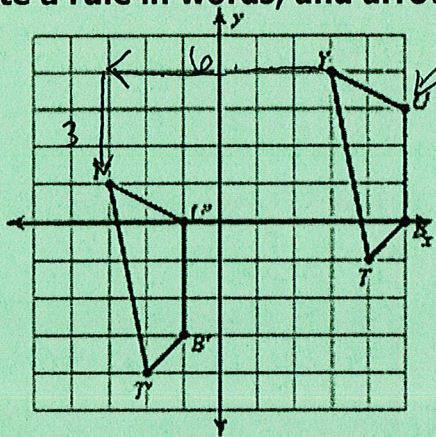


8) reflection across the x-axis



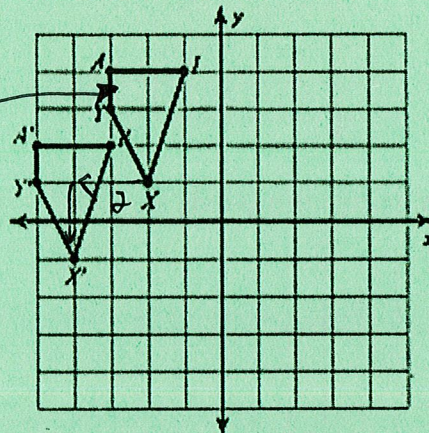
Write a rule in words, and arrow notation to describe each transformation.

9)



Start here, no primes

10)



Words: Left 6, down 3

Rule:  $(x, y) \rightarrow (x - 6, y - 3)$

Vector:  $\langle -6, -3 \rangle$

Words: Left 2, down 2

Rule:  $(x, y) \rightarrow (x - 2, y - 2)$

Vector:  $\langle -2, -2 \rangle$

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

11) translation: 1 unit right and 1 unit up

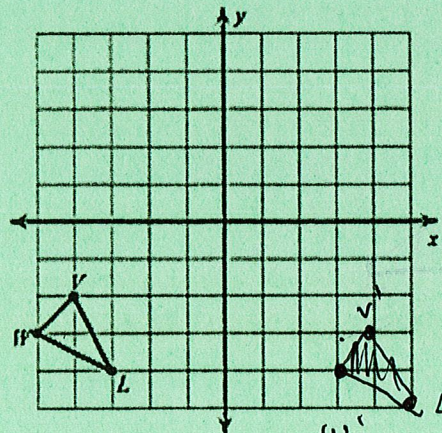
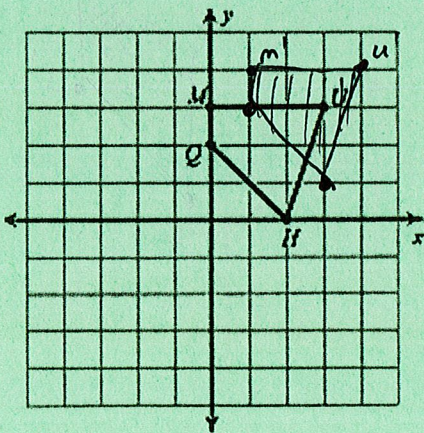
12) translation: 8 units right and 1 unit down

$M'(1, 4)$

$U'(4, 4)$

$H'(3, 1)$

$Q'(1, 3)$



$W'(3, -4)$

$V'(4, -3)$

$L'(5, -5)$