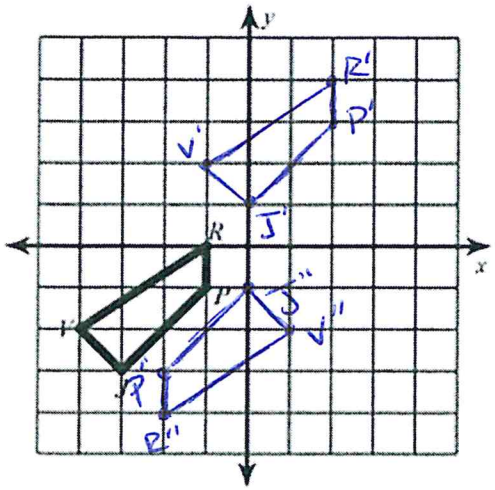
Applying Transformations Review **Name:** Key **Hour:**_____

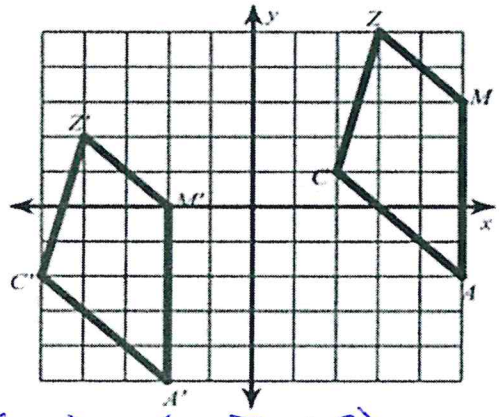


1) Preform two ~~different~~ transformations on the given figure RPVJ and write the new coordinates for R"P"V"J"

a-Translate the given picture 3 units right and 4 units up

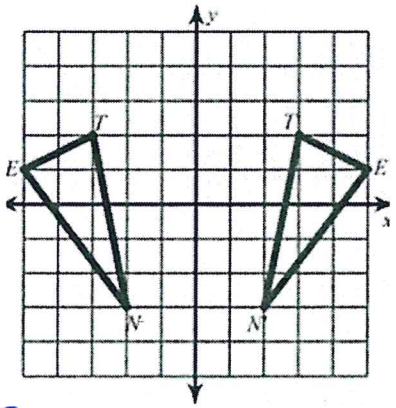
b- Rotate 180 degrees

2) Write a rule describing the below transformations



$(x,y) \rightarrow (x-7, y-3)$

LEFT 7, DOWN 3



REFLECT ACROSS y-AXIS

3) Write the rules of the following transformations:

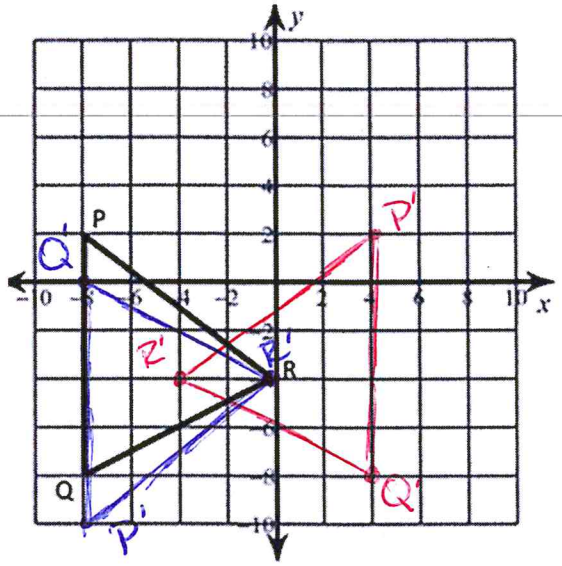
a- Reflect across x-axis $(x,y) \rightarrow (x,-y)$

b- Reflect across y-axis $(x,y) \rightarrow (-x,y)$

c- Rotate 180 degrees $(x,y) \rightarrow (-x,-y)$

d- Translate 2 units down and 4 units to the right $(x,y) \rightarrow (x+4, y-2)$

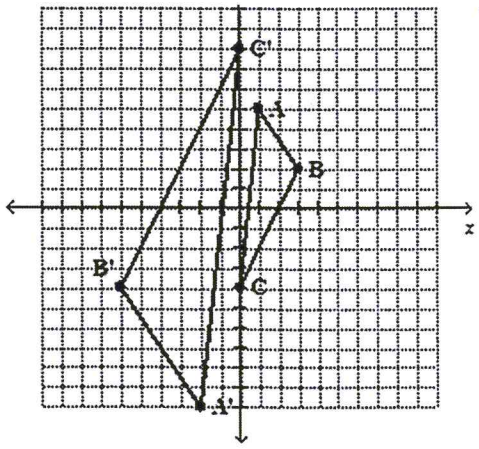
e- Dilation by a scale factor of 8 $(x,y) \rightarrow (8x, 8y)$



4) **Reflect the given image across x = -2**

5) **Reflect the given image across y = -4**

6) **Describe the series of transformations preformed in the below picture and write a rule describing them**



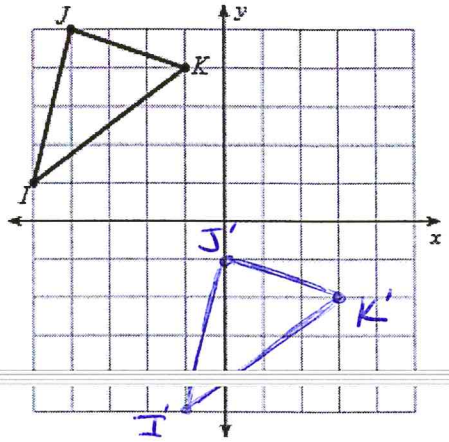
Dilation with a scale factor of 2 and a 180° rotation

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

7.

Graph the image of the figure using the transformation given.

translation: 4 units right and 6 units down



reflection across $y = 1$