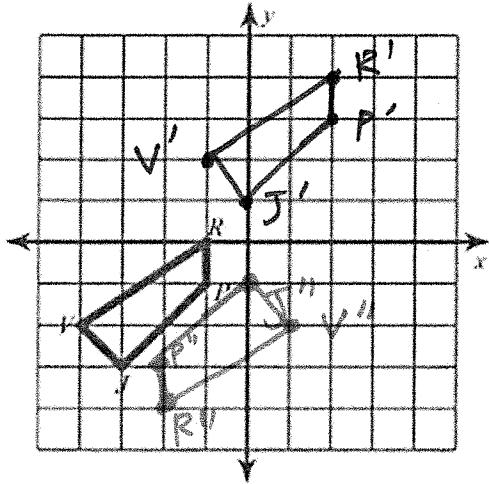


Name: Key

Transformation (re-assessment)

Test Friday 11/8/19

Review part 2



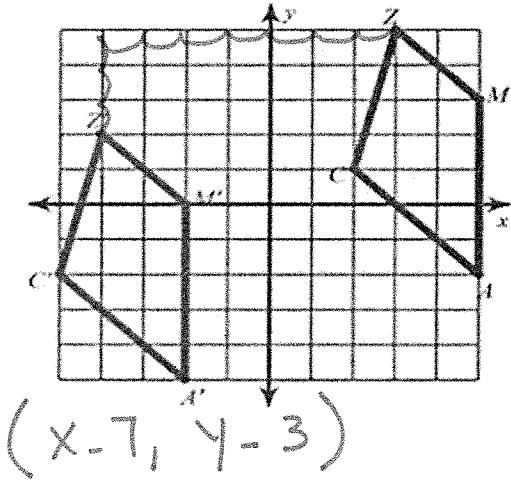
1) Perform two different transformations on the given figure RPVJ and write the new coordinates for R''P''V''J''

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

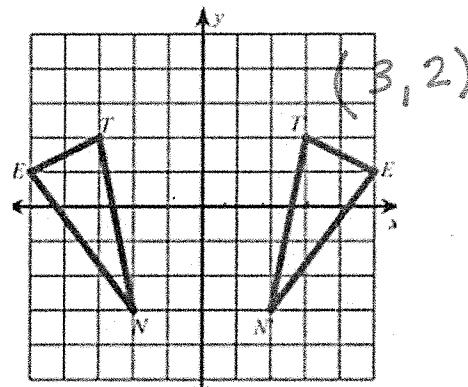
b- Rotate 180 degrees

$$\begin{array}{ll} R'(2, 4) & J'(0, 1) \\ P'(2, 3) & V'(-1, 2) \\ R''(-2, -4) & J''(0, -1) \\ P''(-2, -3) & V''(1, -2) \end{array} \left. \begin{array}{l} \text{Translate} \\ \text{Rotate } 180^\circ \end{array} \right\}$$

2) Write a rule describing the below transformations



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



$$\begin{matrix} (3, 2) \\ (-3, 2) \end{matrix}$$

Reflection across y-axis
 $(3, 2) \rightarrow (-3, 2)$

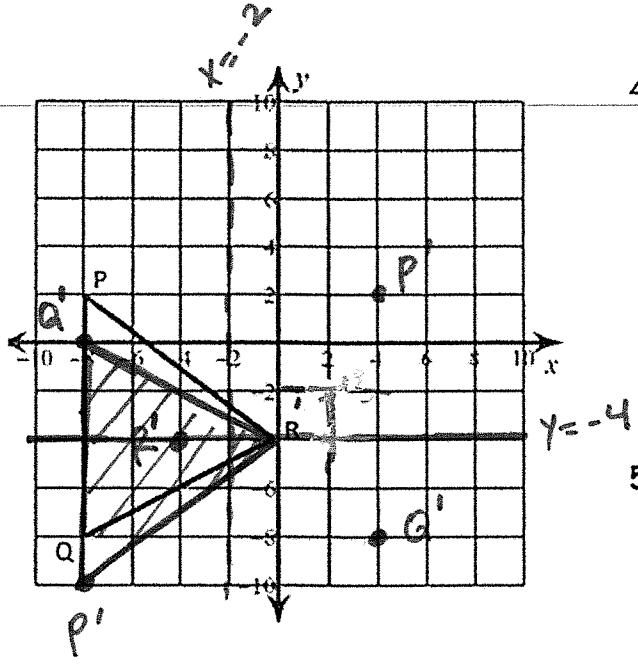
3) Write the rules of the following transformations:

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



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

$$R'(-4, -4) \quad P'(4, 2)$$

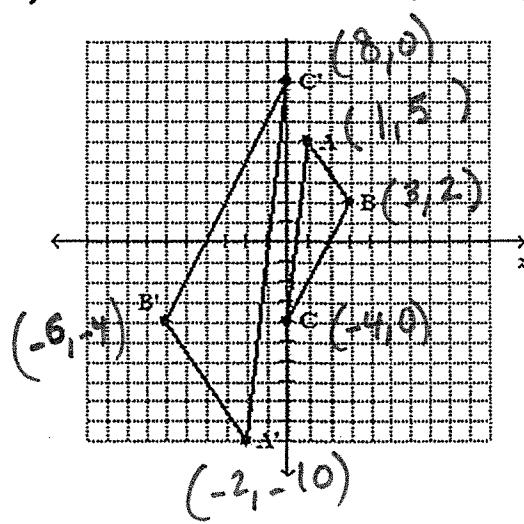
$$Q'(0, -8)$$

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

$$Q'(0, -8) \quad P'(-8, -10)$$

$$R'(0, -4)$$

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



$$A(1, 5) \quad B(3, 2) \quad C(8, 0)$$

$$A'(-2, -10) \quad B'(-6, -4) \quad C'(8, 0)$$

Dilated by 2. $(x, y) \rightarrow (2x, 2y)$
 Rotated by 180° $(2x, 2y) \rightarrow (-2x, -2y)$

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