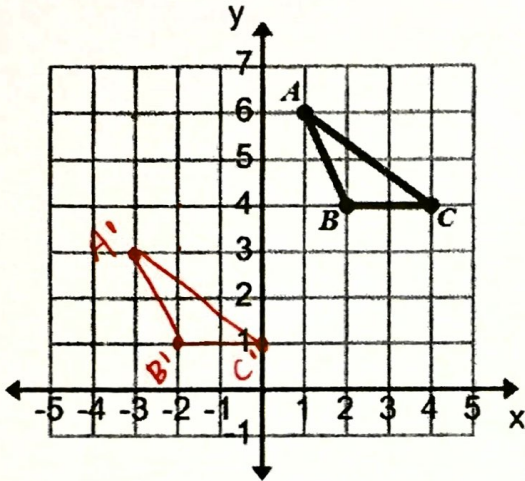


**8-1,2,3,4 HONORS Quiz PRACTICE - Transformations**

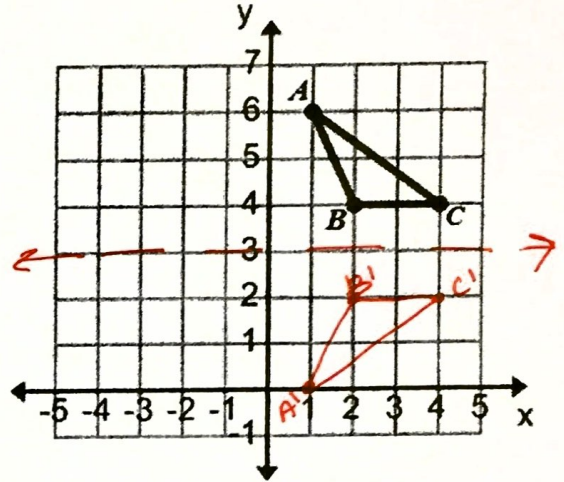
**Instructions:** For questions #1-4 perform the given transformation. State the vertices of the image.

1. Translation:  $(x, y) \rightarrow (x - 4, y - 3)$



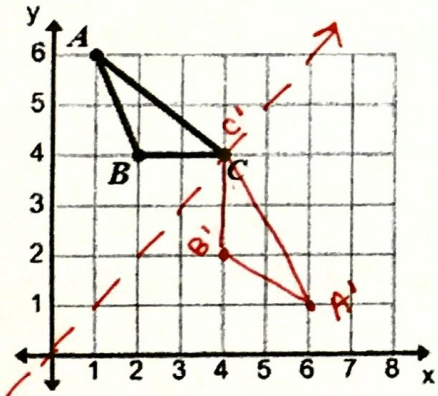
New Vertices:  $A'(-3,3)$   $B'(-2,1)$   
 $C'(0,1)$

2. Reflect over the line  $y = 3$



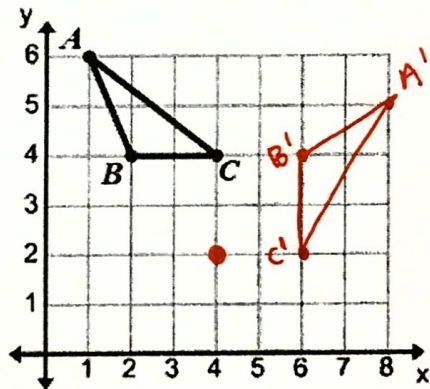
New Vertices:  $A'(1,0)$   $B'(2,2)$   $C'(4,2)$

3. Reflect over the line  $y = x$



New Vertices:  $A'(6,1)$   $B'(4,2)$   $C'(4,4)$

4. Rotate  $90^\circ$  clockwise around the point  $(4, 2)$



New Vertices:  $A'(8,5)$   $B'(6,4)$   $C'(6,2)$

5. State the series of transformations that would carry the pre-image onto the image. BE SPECIFIC!!!

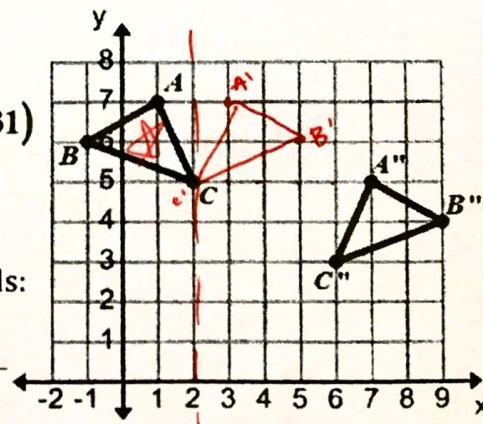
- Identify the transformation for EACH transformation (ie: translation, reflection, or rotation)
- Describe the details of the transformation  
(ie: if a translation, write the coordinate notation  $(x, y) \rightarrow (x - 17, y + 31)$   
if a reflection, write the line of reflection  $y = 25$   
if a rotation, describe the rotation and give the center of rotation)

1<sup>st</sup> Transformation & Details:

Reflect over the line  $x=2$

2<sup>nd</sup> Transformation & Details:

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



\*Answers may vary!\*