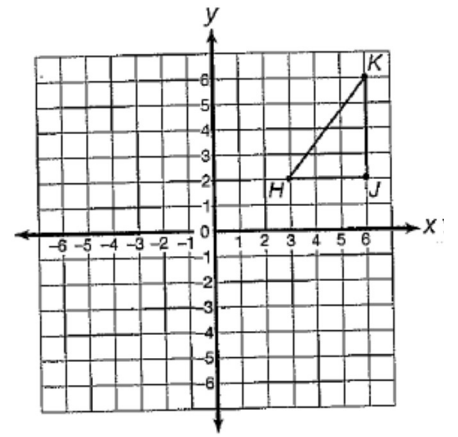


20) Write the coordinates for the vertices of  $\triangle H'J'K'$  after  $\triangle HJK$  has been translated three units to the left and four units down?



H' ( \_\_\_\_\_ , \_\_\_\_\_ )

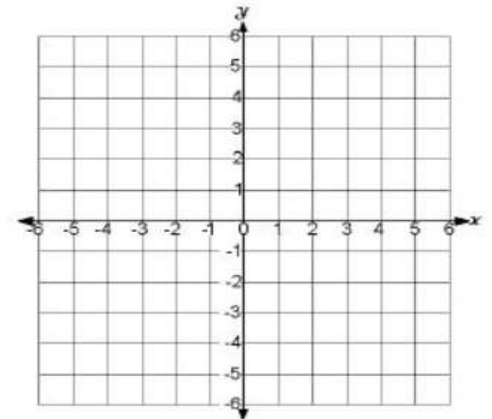
J' ( \_\_\_\_\_ , \_\_\_\_\_ )

K' ( \_\_\_\_\_ , \_\_\_\_\_ )

Rule:  $(x, y) \rightarrow$  \_\_\_\_\_

21)  $\triangle ABC$  is given with coordinates  $A(-5, 1)$ ,  $B(-3, 6)$ , and  $C(-2, 3)$ .

Draw an image rotated  $180^\circ$  about the origin. Label this image  $\triangle A'B'C'$ . Write the coordinates of  $\triangle A'B'C'$ .



A' ( \_\_\_\_\_ , \_\_\_\_\_ )

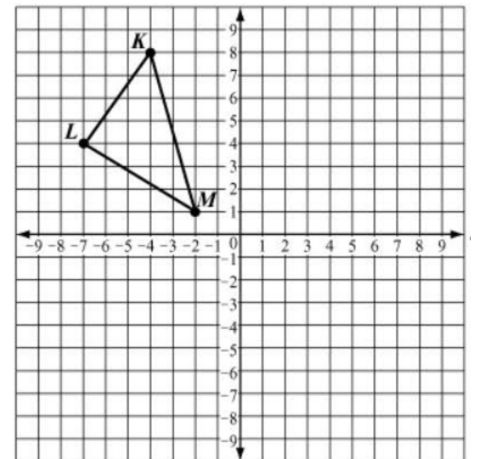
B' ( \_\_\_\_\_ , \_\_\_\_\_ )

C' ( \_\_\_\_\_ , \_\_\_\_\_ )

Rule:  $(x, y) \rightarrow$  \_\_\_\_\_

22)  $\triangle KLM$  is given with coordinate  $K(-4, 8)$ ,  $L(-7, 4)$ , and  $M(-2, 1)$ .

Draw an image rotated  $90^\circ$  clockwise about the origin. Label this image  $\triangle K'L'M'$ . Write the coordinates of  $\triangle K'L'M'$ .



K' ( \_\_\_\_\_ , \_\_\_\_\_ )

L' ( \_\_\_\_\_ , \_\_\_\_\_ )

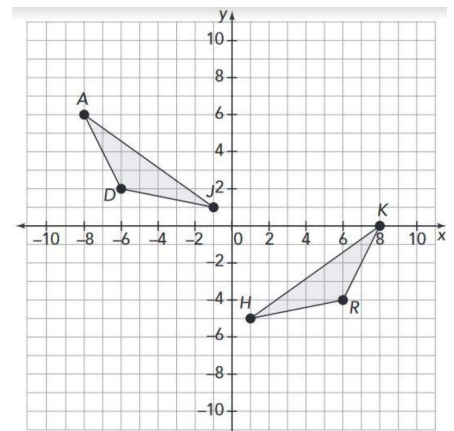
M' ( \_\_\_\_\_ , \_\_\_\_\_ )

Rule:  $(x, y) \rightarrow$  \_\_\_\_\_

23) Two congruent figures are shown in the coordinate plane below. What are the two transformations used to map  $\triangle ADJ$  to  $\triangle KRH$ . Please be specific and describe the rule.

1 \_\_\_\_\_

2 \_\_\_\_\_



24) What type of transformation was performed given the following coordinates: How do you know?

a.)

Triangle <i>HKL</i>		Triangle <i>H'K'L'</i>	
<i>H</i>	(5, -3)	<i>H'</i>	(5,3)
<i>K</i>	(2, 3)	<i>K'</i>	(2,-3)
<i>L</i>	(0, -4)	<i>L'</i>	(0,4)

Type of transformation:

I know this because

Rule: \_\_\_\_\_

b.)

Triangle <i>HKL</i>		Triangle <i>H'K'L'</i>	
<i>H</i>	(5, -3)	<i>H'</i>	(7,-4)
<i>K</i>	(2, 3)	<i>K'</i>	(4,2)
<i>L</i>	(0, -4)	<i>L'</i>	(2,-5)

Type of transformation:

I know this because

Rule: \_\_\_\_\_