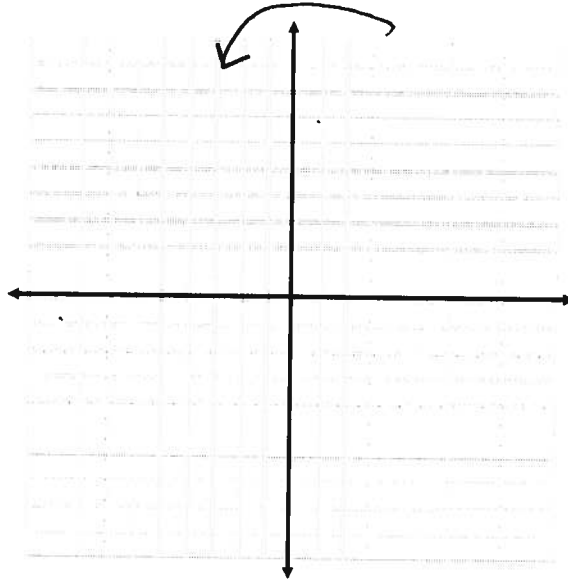


*CCW*

Use the coordinates given and write the image of rotation 90 degrees  
Use graph if helpful.

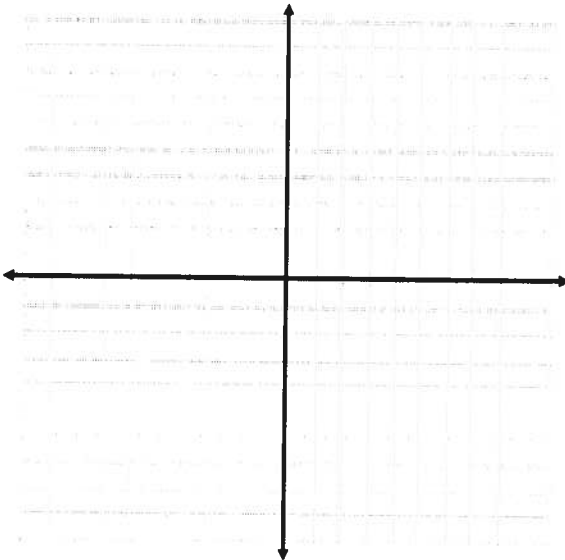
*A*



<i>P</i>	<i>P'</i>
(3, 4)	(-4, 3)
(-3, 4)	(-4, -3)
(-3, -4)	(4, -3)
(3, -4)	(4, 3)
(3, 0)	(0, 3)
(0, 4)	(-4, 0)

Reflect points P over the x-axis then the y-axis. Record your answers in the table. Use graph if helpful

*B.*



<i>P</i>	<i>P<sub>x</sub></i>	<i>P<sub>y</sub></i>
(3, 4)	(3, -4)	(-3, 4)
(-3, 4)	(-3, -4)	(3, 4)
(-3, -4)	(-3, 4)	(3, -4)
(3, -4)	(3, 4)	(-3, -4)
(3, 0)	(3, 0)	(-3, 0)
(0, 4)	(0, -4)	(0, 4)

Write a rule to describe a reflection over the x-axis.

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

Write a rule to describe a reflection over the y-axis.

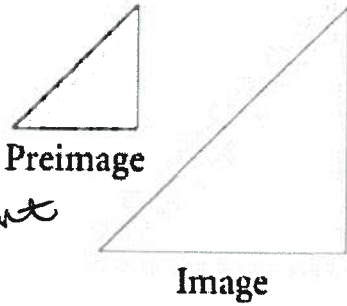
$$(x, y) \rightarrow (-x, y)$$

Quiz Review

Name:

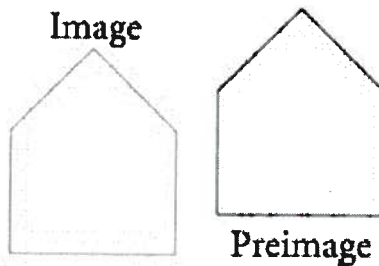
State whether the transformation appears to be an isometry. Explain.

1.



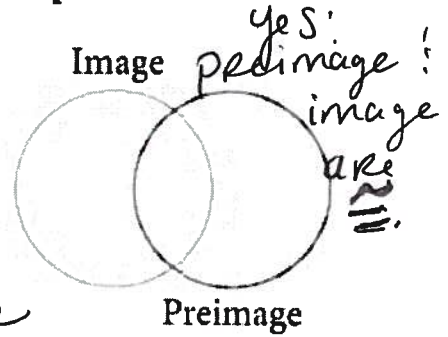
NO;  
not  
congruent

2.



yes: preimage & image  
are congruent

3.



4. Describe in words the translation represented by  $(x, y) \rightarrow (x - 3, y + 5)$ .

Left 3, Up 5

10.  $\triangle WXY$  has vertices  $W(-4, 1)$ ,  $X(2, -7)$ , and  $Y(0, -3)$ . Find its image for the translation  $(x, y) \rightarrow (x - 2, y + 5)$ .

$W'(-6, 6)$   $X'(0, -2)$   $Y'(-2, 2)$

Reflect MATH over the line  $y = x$

$M(2,0) \rightarrow M'(0,2)$   
 $A(5,3) \rightarrow A'(3,5)$   
 $T(-1,3) \rightarrow T'(3,-1)$   
 $H(-5,0) \rightarrow H'(0,-5)$

Rotate the following image 270 degrees CW around the origin

$M(2,0) \rightarrow M'(0,2)$   $90^\circ$  ccw  
 $A(5,3) \rightarrow A'(-3,5)$   
 $T(-1,3) \rightarrow T'(-3,-1)$   
 $H(-5,0) \rightarrow H'(0,-5)$

