

1) Perform the given rotations about the origin and record the images.

a)  $A(2, 7)$        $R_{O,90^\circ}(A) = A'(\underline{\quad}, \underline{\quad})$

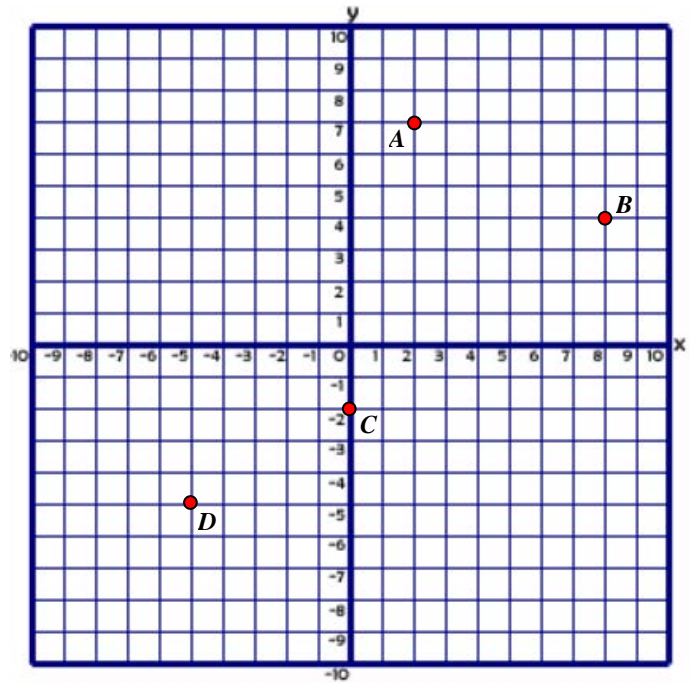
b)  $B(8, 4)$        $R_{O,90^\circ}(B) = B'(\underline{\quad}, \underline{\quad})$

c)  $C(0, -2)$        $R_{O,90^\circ}(C) = C'(\underline{\quad}, \underline{\quad})$

d)  $D(-5, -5)$        $R_{O,90^\circ}(D) = D'(\underline{\quad}, \underline{\quad})$

e) What is the general coordinate rule for a rotation of  $90^\circ$  about the origin?

$R_{O,90^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$



2) Perform the given rotations about the origin and record the images.

a)  $A(2, 7)$        $R_{O,180^\circ}(A) = A'(\underline{\quad}, \underline{\quad})$

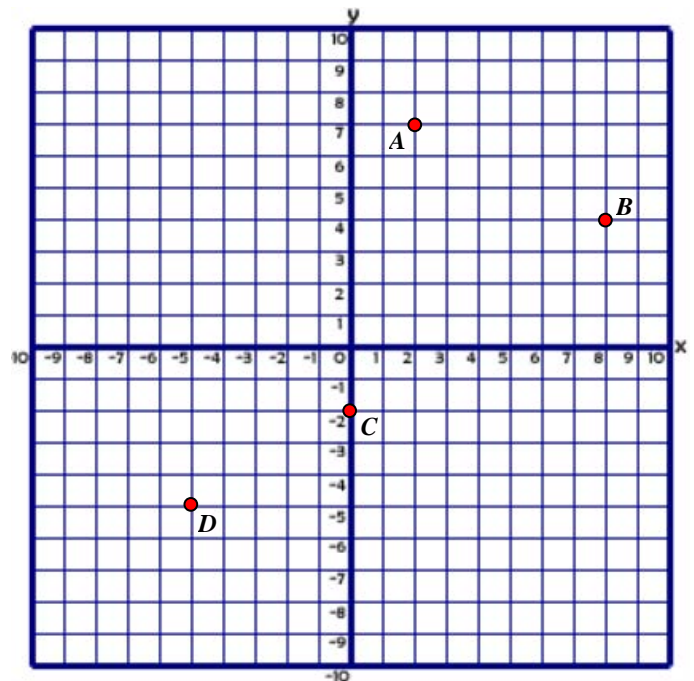
b)  $B(8, 4)$        $R_{O,180^\circ}(B) = B'(\underline{\quad}, \underline{\quad})$

c)  $C(0, -2)$        $R_{O,180^\circ}(C) = C'(\underline{\quad}, \underline{\quad})$

d)  $D(-5, -5)$        $R_{O,180^\circ}(D) = D'(\underline{\quad}, \underline{\quad})$

e) What is the general coordinate rule for a rotation of  $180^\circ$  about the origin?

$R_{O,180^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$





3) Perform the given rotations about the origin and record the images.

a)  $A(2, 7)$        $R_{O,180^\circ}(A) = A'(\underline{\quad}, \underline{\quad})$

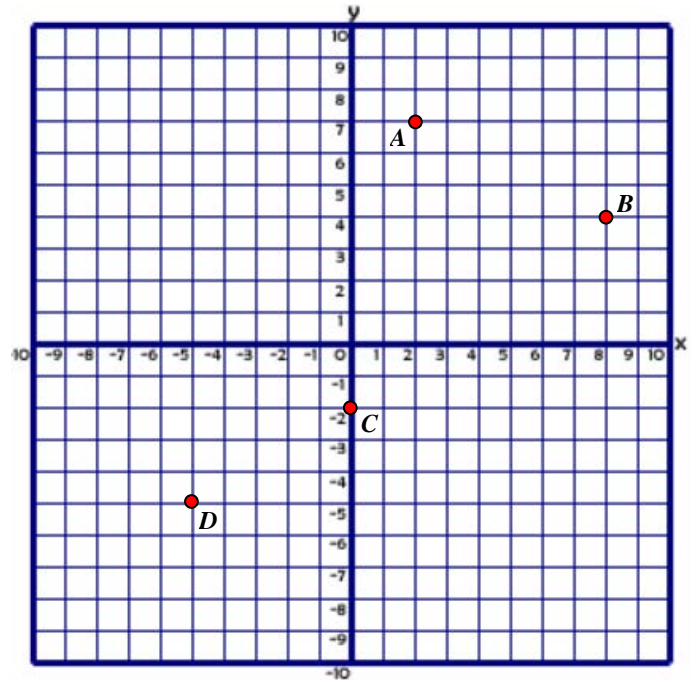
b)  $B(8, 4)$        $R_{O,180^\circ}(B) = B'(\underline{\quad}, \underline{\quad})$

c)  $C(0, -2)$        $R_{O,180^\circ}(C) = C'(\underline{\quad}, \underline{\quad})$

d)  $D(-5, -5)$        $R_{O,180^\circ}(D) = D'(\underline{\quad}, \underline{\quad})$

e) What is the general coordinate rule for a rotation of  $270^\circ$  about the origin?

$$R_{O,180^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$



**SUMMARIZE THE  
ROTATION  
COORDINATE RULES**

$$R_{O,90^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$

$$R_{O,180^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$

$$R_{O,270^\circ}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$

4) Determine the coordinate of the given rotation pre-images and images.

a)  $R_{O,90^\circ}(1, -5) = (\underline{\quad}, \underline{\quad})$

b)  $R_{O,180^\circ}(\underline{\quad}, \underline{\quad}) = (-5, 5)$

c)  $R_{O,270^\circ}(\underline{\quad}, \underline{\quad}) = (1, -9)$

d)  $R_{O,270^\circ}(5, -1) = (\underline{\quad}, \underline{\quad})$

e)  $R_{O,90^\circ}(\underline{\quad}, \underline{\quad}) = (1, 2)$

f)  $R_{O,270^\circ}(7, 0) = (\underline{\quad}, \underline{\quad})$

g)  $R_{O,90^\circ}(-1, 3) = (\underline{\quad}, \underline{\quad})$

h)  $R_{O,180^\circ}(\underline{\quad}, \underline{\quad}) = (11, 7)$

i)  $R_{O,270^\circ}(\underline{\quad}, \underline{\quad}) = (6, -2)$

j)  $R_{O,90^\circ}(-7, -3) = (\underline{\quad}, \underline{\quad})$