

**Geometry – Unit 2 Practice**  
**Reflection Coordinate Rules**

G.CO.G.4

Name: \_\_\_\_\_!

Date: \_\_\_\_\_ Pd: \_\_\_\_\_

1) Perform the given reflections and record the images.

a)  $A(2,7)$       $r_{x\text{-axis}}(A)$       $A'(\underline{\quad}, \underline{\quad})$

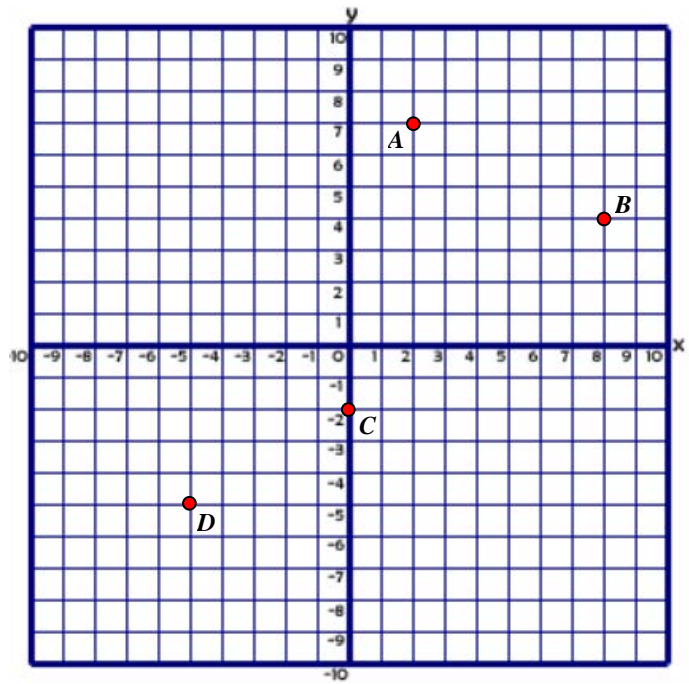
b)  $B(8,4)$       $r_{x\text{-axis}}(B)$       $B'(\underline{\quad}, \underline{\quad})$

c)  $C(0,-2)$       $r_{x\text{-axis}}(C)$       $C'(\underline{\quad}, \underline{\quad})$

d)  $D(-5,-5)$       $r_{x\text{-axis}}(D)$       $D'(\underline{\quad}, \underline{\quad})$

e) What is the coordinate rule for  $r_{x\text{-axis}}$ ?

$$r_{x\text{-axis}}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$



2) Perform the given reflections and record the images.

a)  $A(2,7)$       $r_{y\text{-axis}}(A)$       $A'(\underline{\quad}, \underline{\quad})$

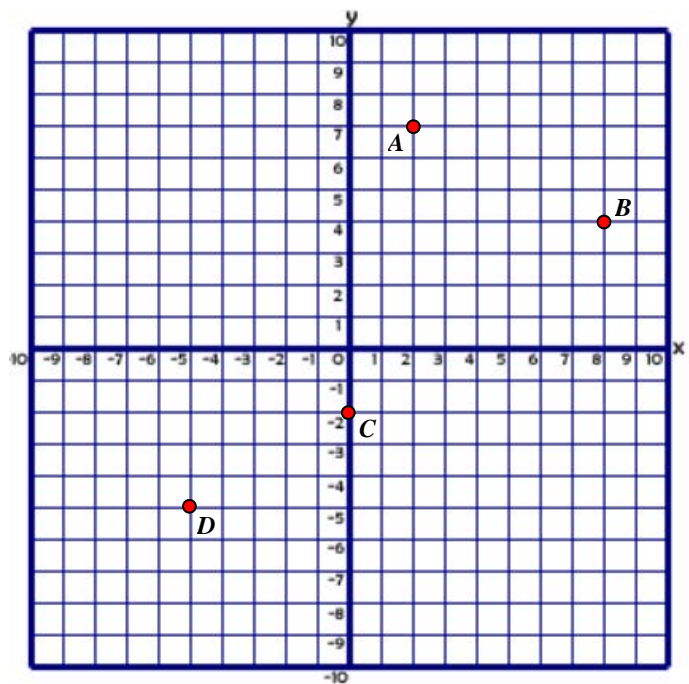
b)  $B(8,4)$       $r_{y\text{-axis}}(B)$       $B'(\underline{\quad}, \underline{\quad})$

c)  $C(0,-2)$       $r_{y\text{-axis}}(C)$       $C'(\underline{\quad}, \underline{\quad})$

d)  $D(-5,-5)$       $r_{y\text{-axis}}(D)$       $D'(\underline{\quad}, \underline{\quad})$

e) What is the coordinate rule for  $r_{y\text{-axis}}$ ?

$$r_{y\text{-axis}}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$

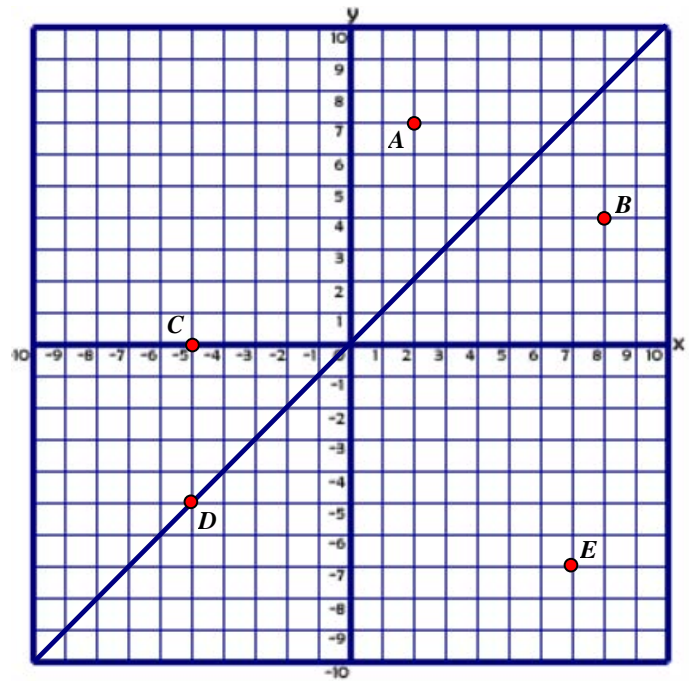




3) Perform the given reflections and record the images.

- a)  $A(2,7)$        $r_{y=x}(A)$        $A'(\underline{\quad}, \underline{\quad})$
- b)  $B(8,4)$        $r_{y=x}(B)$        $B'(\underline{\quad}, \underline{\quad})$
- c)  $C(0,-2)$        $r_{y=x}(C)$        $C'(\underline{\quad}, \underline{\quad})$
- d)  $D(-5,-5)$        $r_{y=x}(D)$        $D'(\underline{\quad}, \underline{\quad})$
- e)  $E(7,-7)$        $r_{y=x}(E)$        $E'(\underline{\quad}, \underline{\quad})$
- f) What is the coordinate rule for  $r_{y=x}$ ?

$$r_{y=x}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$$



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

- a)  $r_{x-axis}(1, -1) \rightarrow (\underline{\quad}, \underline{\quad})$
- b)  $r_{y-axis}(0, 5) \rightarrow (\underline{\quad}, \underline{\quad})$
- c)  $r_{y-axis}(\underline{\quad}, \underline{\quad}) \rightarrow (-6, -1)$
- d)  $r_{x-axis}(0, -3) \rightarrow (\underline{\quad}, \underline{\quad})$
- e)  $r_{x-axis}(\underline{\quad}, \underline{\quad}) \rightarrow (-3, -9)$
- f)  $r_{y=x}(\underline{\quad}, \underline{\quad}) \rightarrow (-3, 5)$
- g)  $r_{y=x}(3, -8) \rightarrow (\underline{\quad}, \underline{\quad})$
- h)  $r_{y-axis}(8, 8) \rightarrow (\underline{\quad}, \underline{\quad})$
- i)  $r_{y=x}(\underline{\quad}, \underline{\quad}) \rightarrow (5, 5)$
- j)  $r_{x-axis}(-3, 0) \rightarrow (\underline{\quad}, \underline{\quad})$
- k)  $r_{x-axis}(7, 0) \rightarrow (\underline{\quad}, \underline{\quad})$
- l)  $r_{x-axis}(0, \sqrt{3}) \rightarrow (\underline{\quad}, \underline{\quad})$

<b>SUMMARIZE THE REFLECTION COORDINATE RULES</b>	$r_{x-axis}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$
	$r_{y-axis}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$
	$r_{y=x}(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$