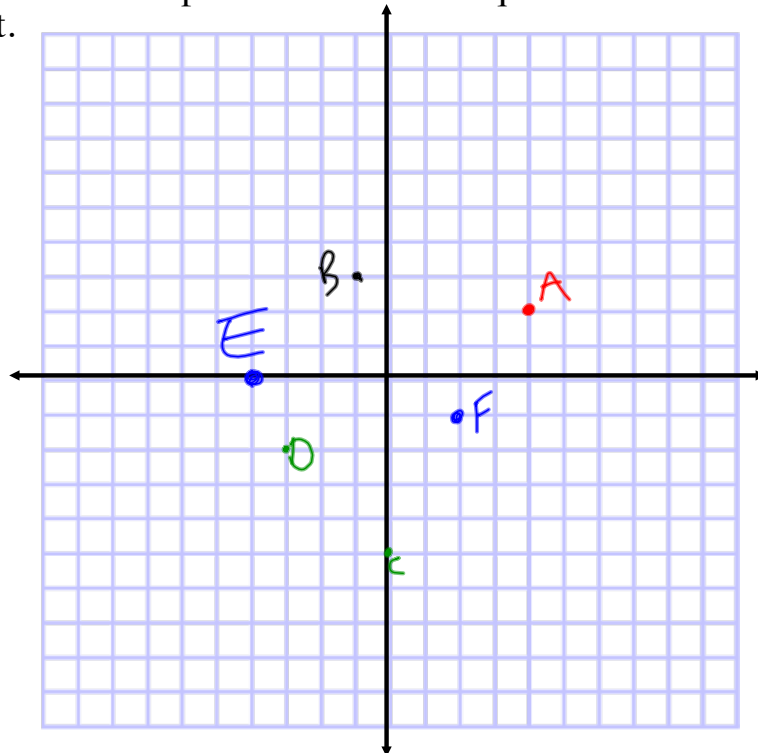


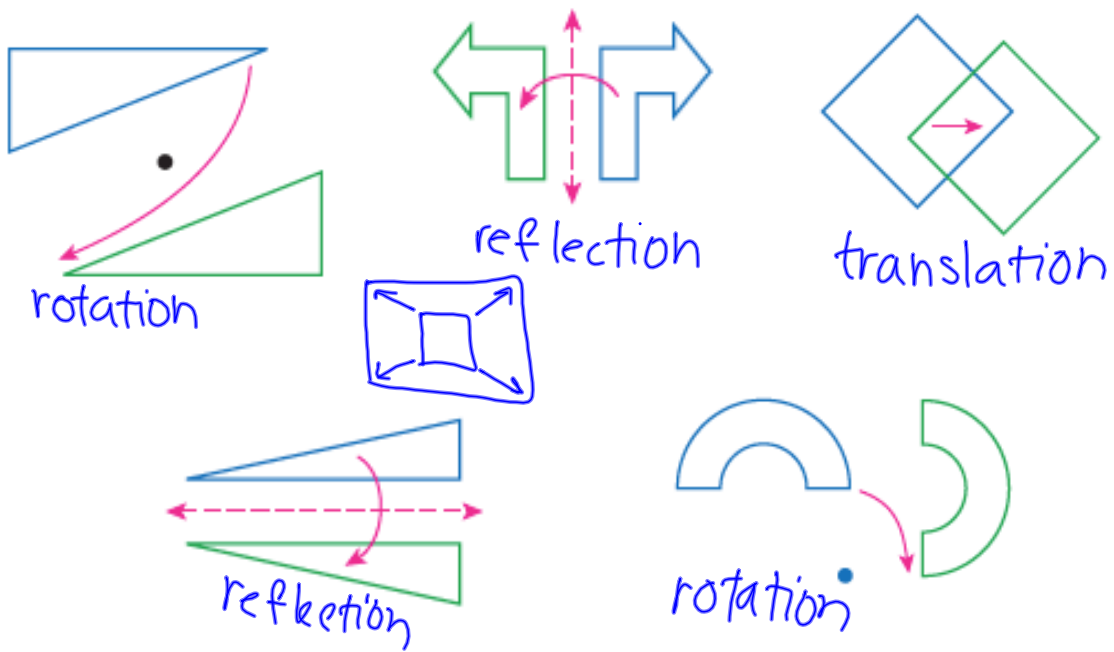
Algebra I Mid-Chapter Review

Plot each point on a coordinate plane and name the quadrant or location of the point.

- A(4, 2)
- B(-1, 3)
- C(0, -5)
- D(-3, -2)
- E(-4, 0)
- F(2, -1)



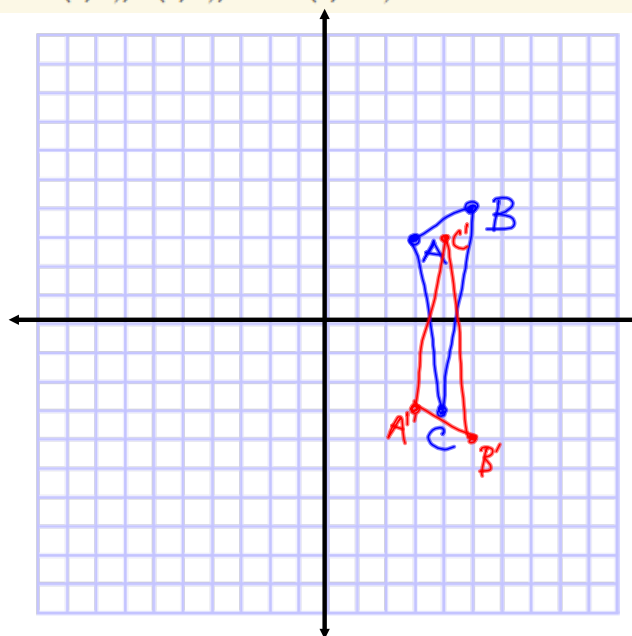
Identify each transformation.



Find the coordinates of the vertices of each figure after the given transformation is performed. Then graph the preimage and its image.

triangle ABC with $A(3, 3)$, $B(5, 4)$, and $C(4, -3)$ reflected over the x -axis

$A'(3, -3)$
 $B'(5, -4)$
 $C'(4, 3)$



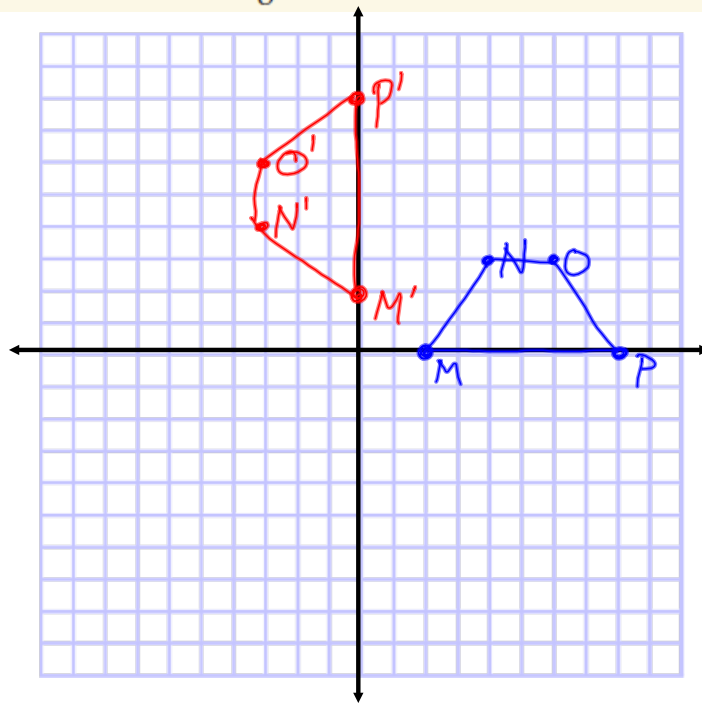
trapezoid $MNOP$ with $M(2, 0)$, $N(4, 3)$, $O(6, 3)$, and $P(8, 0)$ rotated 90° counterclockwise about the origin

$$M'(0, 2)$$

$$N'(-3, 4)$$

$$O'(-3, 6)$$

$$P'(0, 8)$$



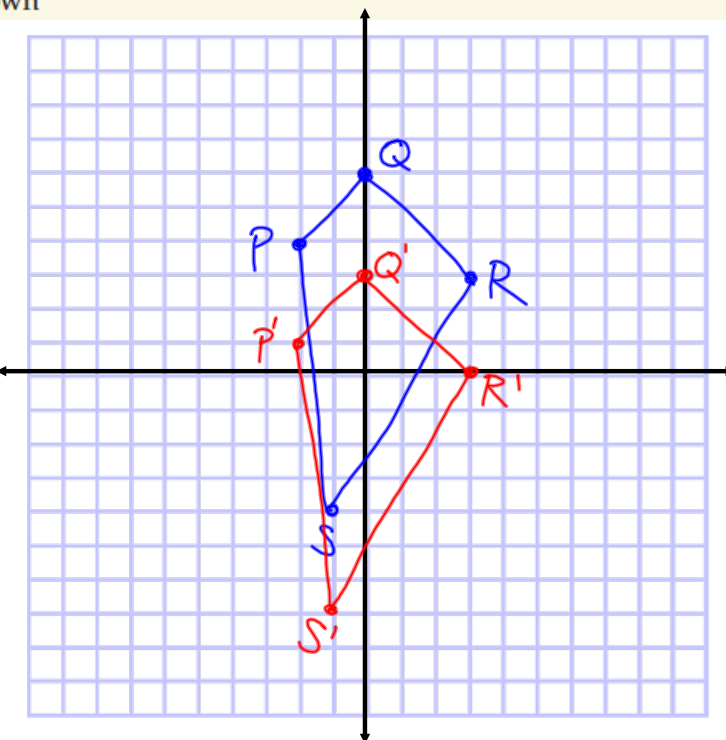
quadrilateral $PQRS$ with $P(-2, 4)$, $Q(0, 6)$, $R(3, 3)$, and $S(-1, -4)$ translated 3 units down

$$P'(-2, 1)$$

$$Q'(0, 3)$$

$$R'(3, 0)$$

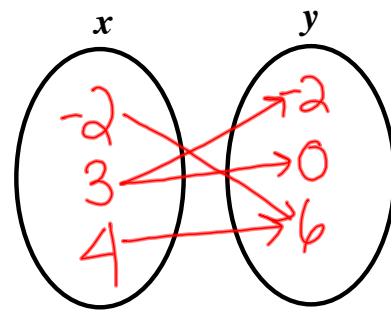
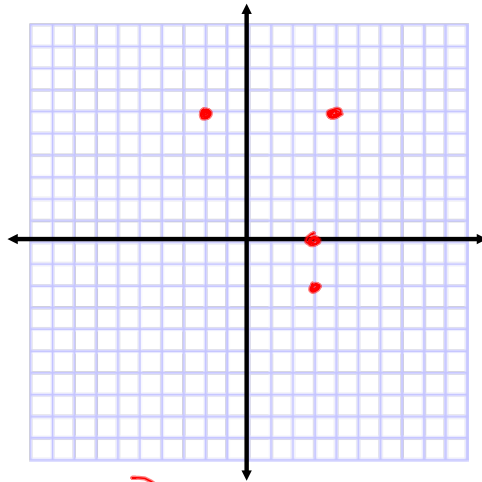
$$S'(-1, -7)$$



Express the relation as a table, a graph, and a mapping. Then determine the domain and range.

$$\{(-2, 6), (3, -2), (3, 0), (4, 6)\}$$

x	y
-2	6
3	-2
3	0
4	6



$$D = \{-2, 3, 4\}$$

$$R = \{-2, 0, 6\}$$

Find the solution set, given the replacement set $\{(3, 0), (2, 1), (-2, -1), (4, -1)\}$

$$2x + 2y = 6$$

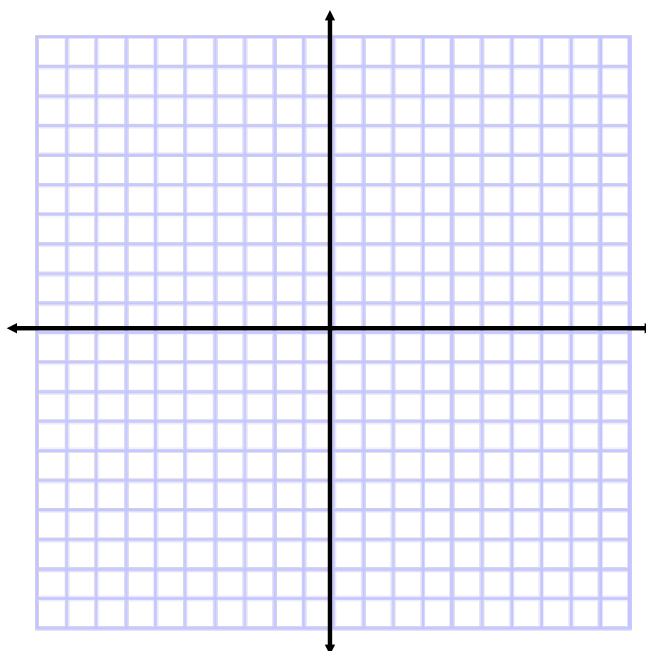
x	y	$2x + 2y = 6$	T or F
3	0	$2 \cdot 3 + 2 \cdot 0 = 6$ $6 + 0 = 6$ $6 = 6$	T
2	1	$2 \cdot 2 + 2 \cdot 1 = 6$ $4 + 2 = 6$ $6 = 6$	T
-2	-1	$2(-2) + 2(-1) = 6$ $-4 + 2 = 6$ $-6 = 6$	F
4	-1	$2 \cdot 4 + 2(-1) = 6$ $8 + -2 = 6$ $6 = 6$	T

$$\{(3, 0), (2, 1), (4, -1)\}$$

Solve the equation if the domain is $\{-4, -2, 0, 2, 4\}$. Graph the solution set.

$$\begin{aligned} 3x + 2y &= 9 \\ \frac{-3x}{2} &= \frac{9-3x}{2} \\ y &= \frac{9+3x}{2} \end{aligned}$$

x	$y = \frac{9+3x}{2}$	y	(x, y)
-4	$\frac{9+(-3)(-4)}{2}$	$2\frac{1}{2}$	$(-4, 10\frac{1}{2})$
-2	$\frac{9+(-3)(-2)}{2}$	$1\frac{1}{2}$	$(-2, 7\frac{1}{2})$
0	$\frac{9+(-3)(0)}{2}$	$4\frac{1}{2}$	$(0, 4\frac{1}{2})$
2	$\frac{9+(-3)(2)}{2}$	$1\frac{1}{2}$	$(2, 1\frac{1}{2})$
4	$\frac{9+(-3)(4)}{2}$	$-\frac{1}{2}$	$(4, -\frac{1}{2})$



Assignment:

Chapter 4 Mid-Chapter Test
Tomorrow