

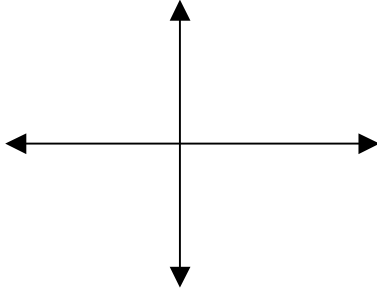
Name _____

1. State the domain and the range each of the following.

i) $(-1, -12)$ $(4, 6)$ $(-7, -6)$ $(3, 10)$ $(0, 0)$ $(2, 3)$

$$\begin{aligned} x &\{-7, -1, 0, 2, 3, 4\} \\ y &\{-12, -6, 0, 3, 6, 10\} \end{aligned}$$

ii)



$$\begin{aligned} \{x \mid -4 \leq x < 2; x \in \mathbf{R}\} \\ \{y \mid -4 \leq y \leq 6; y \in \mathbf{R}\} \end{aligned}$$

iii)

$-4x - 2y = -6$	
-2	
0	
4	

$$\begin{aligned} \{-2 \leq x \leq 4; x \in \mathbf{R}\} \\ \{-5 \leq y \leq 7; y \in \mathbf{R}\} \end{aligned}$$

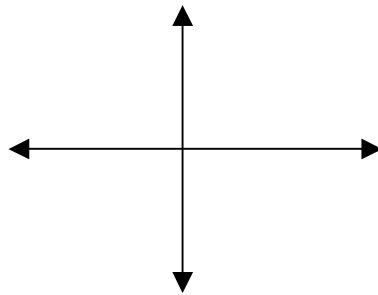
2. Given each of the following sketch the graph of the relation

i)

$\{-5 \leq x \leq 2\}$

$x, y \in \mathbf{R}$

$\{-1 \leq y \leq 8\}$

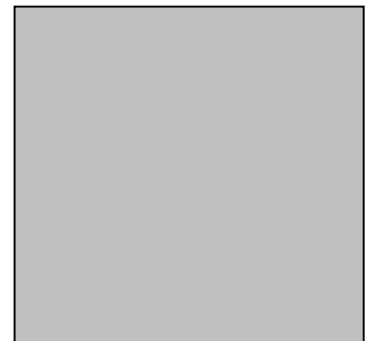
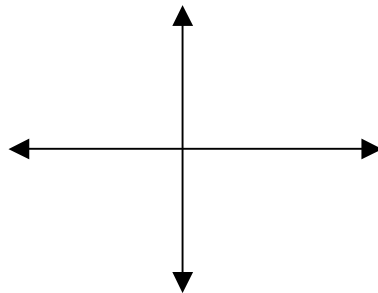


ii)

$\{x = -2\}$

$x, y \in \mathbf{R}$

$\{-4 \leq y \leq 5\}$



3. Which point satisfies the relation given below

(4, 5) or (-4, -5)

$$5x - 10y = -30$$

(4, 5)

4. Which point satisfies both relation statements given below

(7.5, 1) or (6, 0)

$$2x + 5y = 20 \quad \text{and} \quad -4x + 10y = -20$$

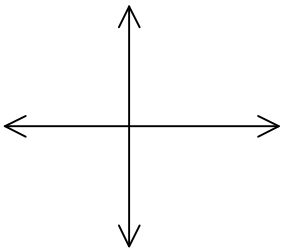
(7.5, 1)

5. Solve for the value 'k' in the following relation if the point (-3, 2) is on the line

$$-6x + ky = -10$$

k = -14

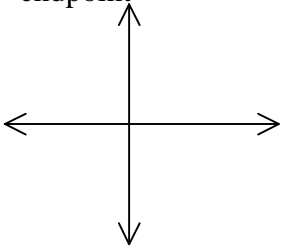
6. Draw a sketch of the following line segment and find the midpoint



A (-10, -4) B(6, 8)

midpoint
= (-2, 2)

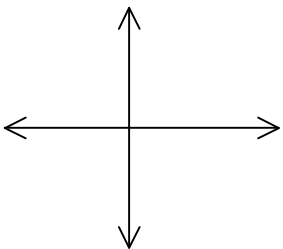
7. Draw a sketch of the following line segment AB, given a starting point and the midpoint ~ find the missing endpoint



A (-4, -6) midpoint (0, -4)

B (4, -2)

8. Draw a sketch of the following line segment and find the length of the line



A(5, -2) B(-8, 3)

AB = 13.9284