

Graph the Letter

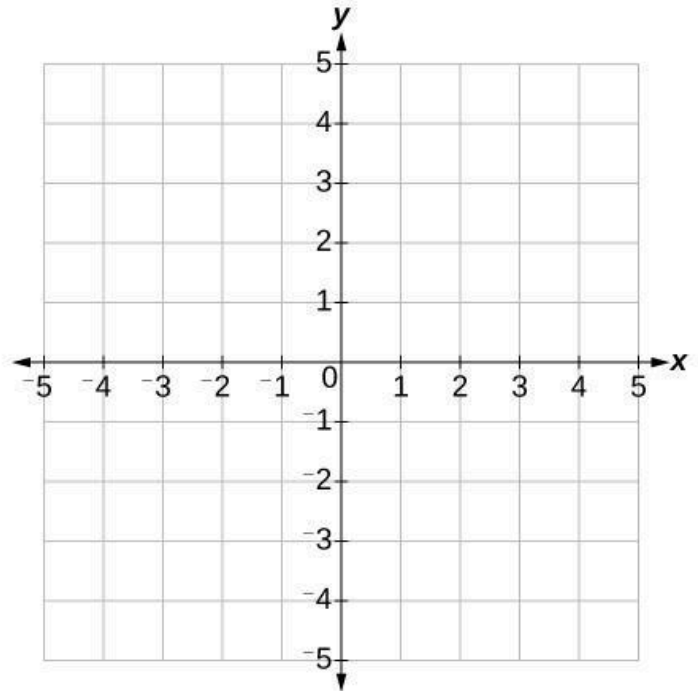
Graph the lines with the indicated domains to reveal the letter each number corresponds to. Write the letter in the blank space!

(a) The line going through $(1, -4)$ perpendicular to the line $y = -\frac{1}{4}x + 6$.

- Domain: $\{1 \leq x \leq 3\}$

(b) The line $y + 4x = 0$

- Domain $\{-1 \leq x \leq 1\}$



The Letter is _____

(a) The line going through $(-3, 1)$ parallel to the line $y = 0x + 2$

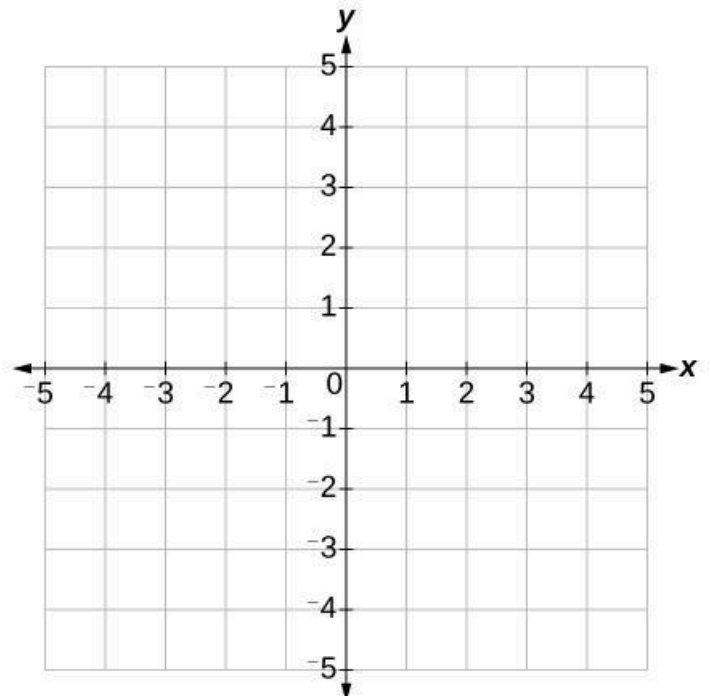
- Domain: $\{-3 \leq x \leq -1\}$

(b) The line passing through the points $(-3, 1)$ and $(-2, 4)$

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

(c) The line $3x + y = -2$

- Domain: $\{-2 \leq x \leq 1\}$

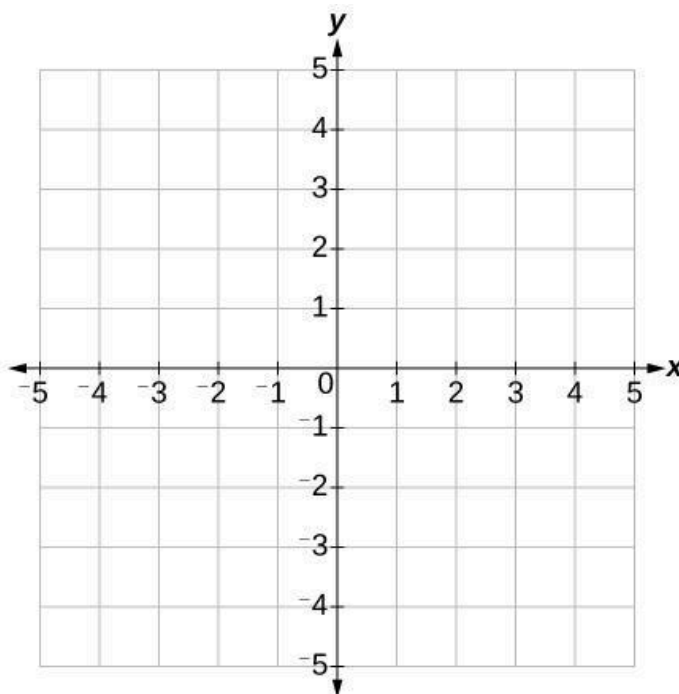


Bonus*** Find the midpoint of the first line segment.

Midpoint: _____

The Letter is _____

-
- (a) The line $x = -3 + 0y$.
- Domain: $\{-2 \leq y \leq 4\}$
- (b) The line $2x - 3y = -9$
- Domain: $\{-3 \leq x \leq 0\}$
- (c) The line $3x + 2y = -7$
- Domain: $\{-3 \leq x \leq -1\}$

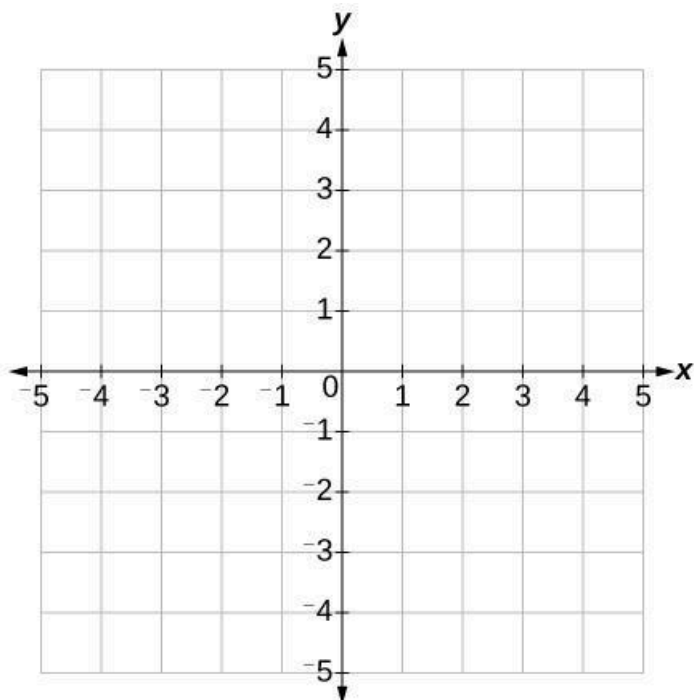


The Letter is _____

-
- (a) The circle with:
- x intercepts at -1 and 3
 - y intercepts at -1 and 3

Bonus***: Find the radius of the circle if the center is at $(1, 1)$. (Hint: use the distance formula)

Radius: _____



The Letter is _____

(a) The line perpendicular to the line $y = -\frac{3}{7}x + 2$ which passes through the point $(-3, -3)$

- Domain: $\{-3 \leq x \leq 0\}$

(b) The line $y - 4 = -4x$

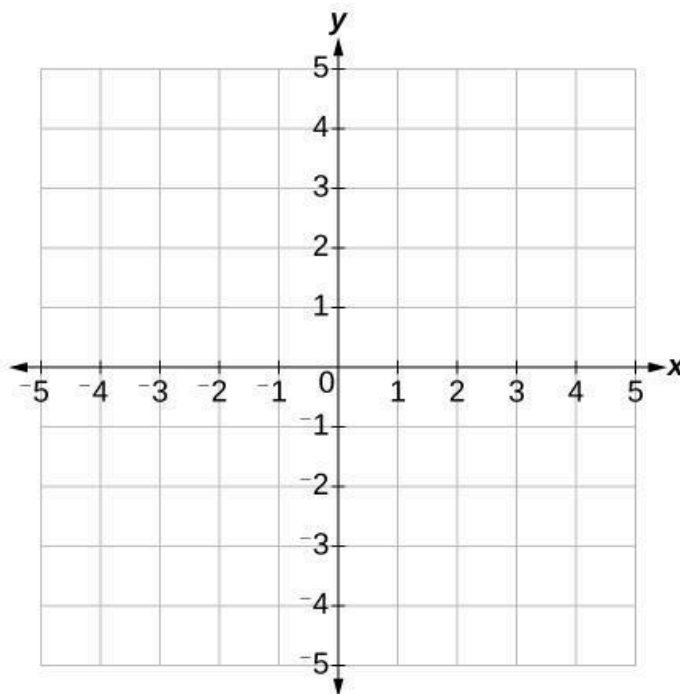
- Domain $\{0 \leq x \leq 1\}$

(c) The line $4x - 4 = y$

- Domain $\{1 \leq x \leq 2\}$

(d) The line passing through points $(2, 4)$ and $(4, -1)$

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



The Letter is _____

(e) The line $y = 4$

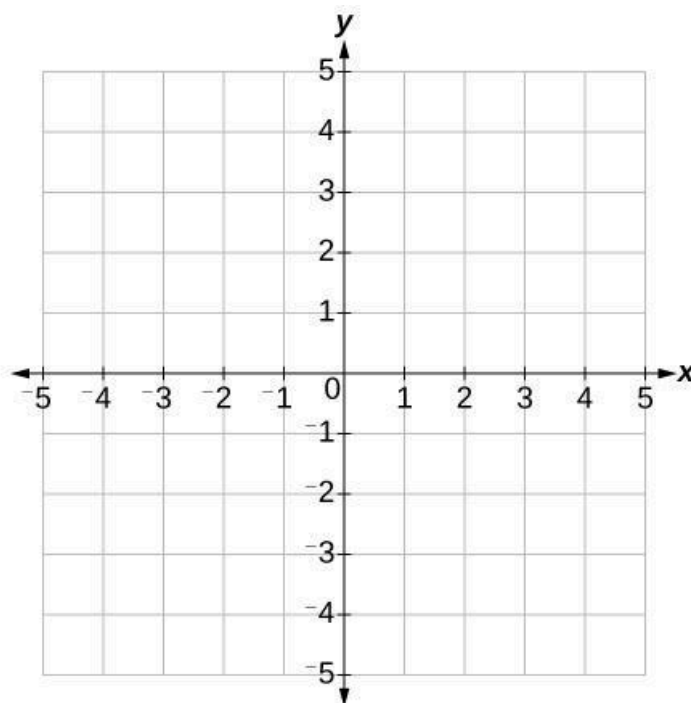
- Domain: $\{-3 \leq x \leq 4\}$

(b) The line $x = \frac{1}{2}$

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

Bonus*** Find the midpoint of the second line

Midpoint: _____



The Letter is _____

Distance and Midpoint Formula Practice

(1) Find the *distance* between the two points.

• $(2, 5)$ and $(-6, 8)$ _____

• $(-7, -6)$ and $(-4, 3)$ _____

• $(1, 0)$ and $(-5, 11)$ _____

• $(3, -3)$ and $(-1, 1)$ _____

• $(7, 8)$ and $(-4, -2)$ _____

(2) Find the *midpoint* between the two points.

• $(2, 5)$ and $(-6, 8)$ _____

• $(-7, -6)$ and $(-4, 3)$ _____

• $(1, 0)$ and $(-5, 11)$ _____

• $(3, -3)$ and $(-1, 1)$ _____

• $(7, 8)$ and $(-4, -2)$ _____