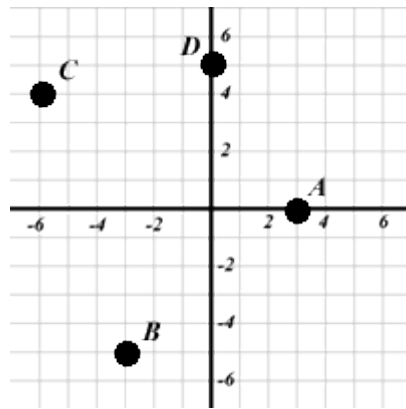


## Review Exercise Set 23

Exercise 1: Graph  $(6,6)$   $(-2,4)$   $(2,-5)$   $(-5,0)$ .

Exercise 2: Give the coordinates of the points labeled A through D.



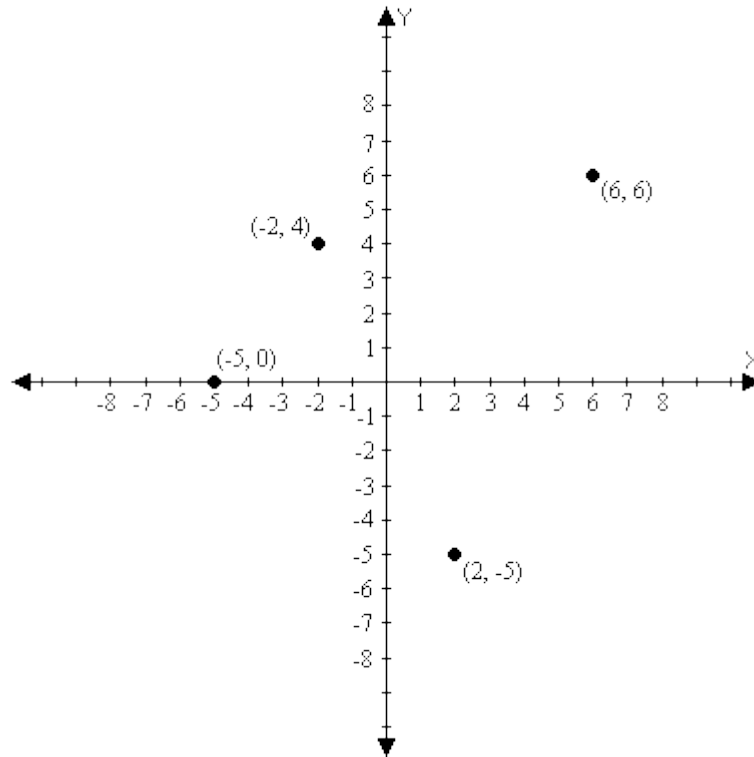
Exercise 3: Is the point  $(5,-1)$  a solution of  $2x - 3y = 12$ ?

Exercise 4: Find the ordered-pair solutions for the expression  $-x - 2y = 0$  when  $x = -4, 0,$  and  $4$ . Graph the ordered pairs on the same graph.

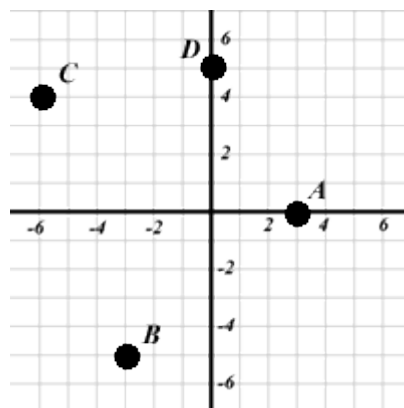
Exercise 5: Find the ordered-pair solutions for the expression  $2x + y = 4$  when  $x = 0, 2,$  and  $4$ . Graph the ordered pairs on the same graph.

## Review Exercise Set 23 Answer Key

Exercise 1: Graph  $(6,6)$   $(-2,4)$   $(2,-5)$   $(-5,0)$ .



Exercise 2: Give the coordinates of the points labeled A through D.



- A:  $(3, 0)$**
- B:  $(-3, -5)$**
- C:  $(-6, 4)$**
- D:  $(0, 5)$**

Exercise 3: Is the point (5,-1) a solution of  $2x - 3y = 12$ ?

To determine if the point is a solution, we will substitute the given values for x and y into the equation.

$$\begin{aligned}2x - 3y &= 12 \\2(5) - 3(-1) &= 12 \\10 + 3 &= 12 \\13 &= 12 \text{ False}\end{aligned}$$

**Since we obtain a false statement (5, -1) is not a solution of  $2x - 3y = 12$ .**

Exercise 4: Find the ordered-pair solutions for the expression  $-x - 2y = 0$  when  $x = -4, 0,$  and  $4$ . Graph the ordered pairs on the same graph.

Substitute the given values for x into the equation to determine the corresponding y values.

$$x = -4$$

$$\begin{aligned}-x - 2y &= 0 \\-(-4) - 2y &= 0 \\4 - 2y &= 0 \\-2y &= -4 \\y &= 2\end{aligned}$$

ordered pair is (-4, 2)

$$x = 0$$

$$\begin{aligned}-x - 2y &= 0 \\-(0) - 2y &= 0 \\0 - 2y &= 0 \\-2y &= 0 \\y &= 0\end{aligned}$$

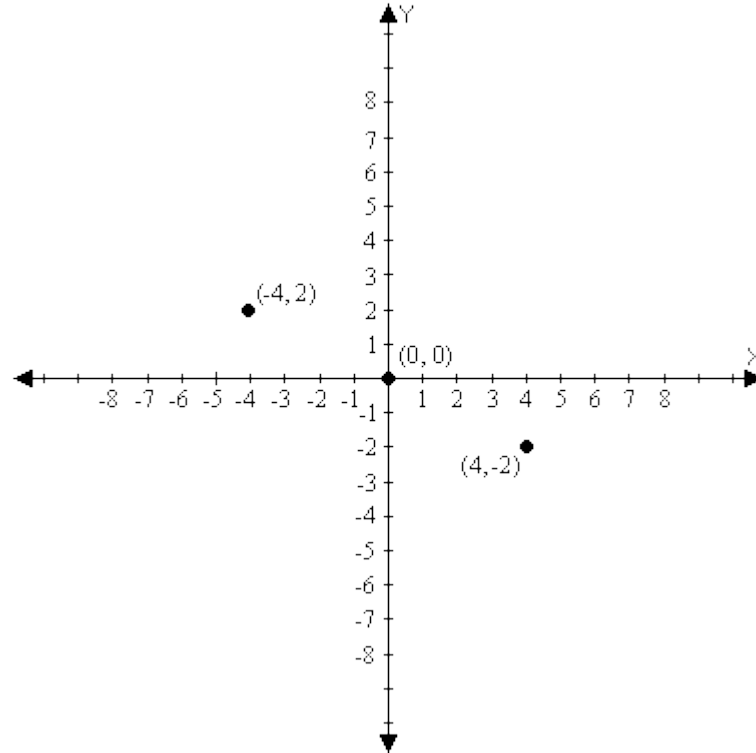
ordered pair is (0, 0)

$$x = 4$$

$$\begin{aligned}-x - 2y &= 0 \\-(4) - 2y &= 0 \\-4 - 2y &= 0 \\-2y &= 4 \\y &= -2\end{aligned}$$

ordered pair is (4, -2)

Graph the ordered pairs



Exercise 5: Find the ordered-pair solutions for the expression  $2x + y = 4$  when  $x = 0, 2,$  and  $4$ . Graph the ordered pairs on the same graph.

Substitute the given values for  $x$  into the equation to determine the corresponding  $y$  values.

$$x = 0$$

$$\begin{aligned} 2x + y &= 4 \\ 2(0) + y &= 4 \\ 0 + y &= 4 \\ y &= 4 \end{aligned}$$

ordered pair is  $(0, 4)$

$$x = 2$$

$$\begin{aligned} 2x + y &= 4 \\ 2(2) + y &= 4 \\ 4 + y &= 4 \\ y &= 0 \end{aligned}$$

ordered pair is  $(2, 0)$

$$x = 4$$

$$2x + y = 4$$

$$2(4) + y = 4$$

$$8 + y = 4$$

$$y = -4$$

ordered pair is (4, -4)

Graph the ordered pairs

