

## Review Exercise Set 24

Exercise 1: Graph  $y = 2x - 3$  by plotting the points where  $x = -2, 0, 2$ .

Exercise 2: Graph  $y = \frac{1}{5}x + 4$  by plotting the points where  $x = -5, 0, 5$ .

Exercise 3: Graph  $2x - 3y = -9$ .

Exercise 4: Graph  $y = -4$ .

Exercise 5: Graph  $x = 5$ .

## Review Exercise Set 24 Answer Key

Exercise 1: Graph  $y = 2x - 3$  by plotting the points where  $x = -2, 0, 2$ .

First, determine the ordered pairs for the given  $x$  values

$$x = -2$$

$$\begin{aligned}y &= 2x - 3 \\y &= 2(-2) - 3 \\y &= -4 - 3 \\y &= -7\end{aligned}$$

ordered pair is  $(-2, -7)$

$$x = 0$$

$$\begin{aligned}y &= 2x - 3 \\y &= 2(0) - 3 \\y &= 0 - 3 \\y &= -3\end{aligned}$$

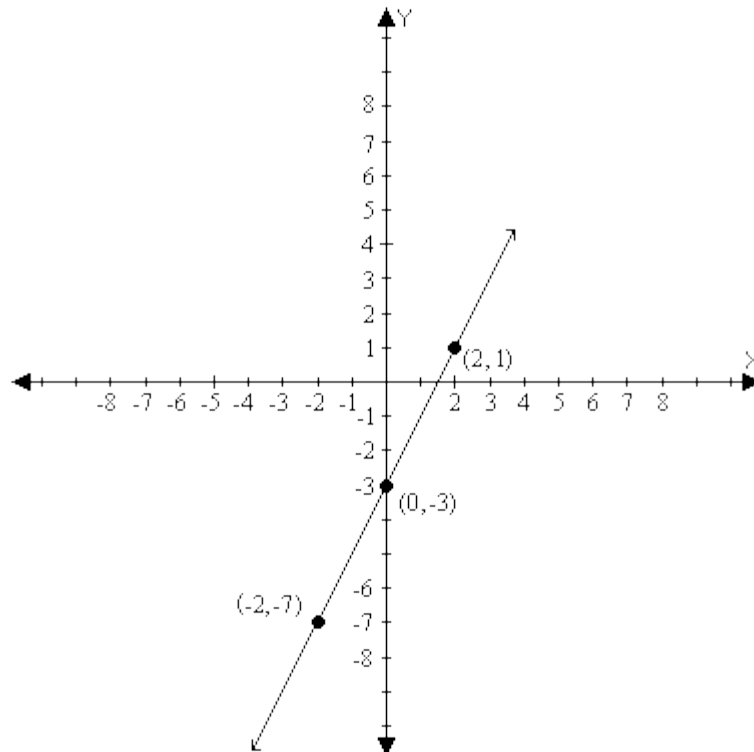
ordered pair is  $(0, -3)$

$$x = 2$$

$$\begin{aligned}y &= 2x - 3 \\y &= 2(2) - 3 \\y &= 4 - 3 \\y &= 1\end{aligned}$$

ordered pair is  $(2, 1)$

Plot the ordered pairs and draw the line through the points



Exercise 2: Graph  $y = \frac{1}{5}x + 4$  by plotting the points where  $x = -5, 0, 5$ .

First, determine the ordered pairs for the given  $x$  values

$$x = -5$$

$$y = \frac{1}{5}x + 4$$

$$y = \frac{1}{5}(-5) + 4$$

$$y = -1 + 4$$

$$y = 3$$

ordered pair is  $(-5, 3)$

$$x = 0$$

$$y = \frac{1}{5}x + 4$$

$$y = \frac{1}{5}(0) + 4$$

$$y = 0 + 4$$

$$y = 4$$

ordered pair is  $(0, 4)$

$$x = 5$$

$$y = \frac{1}{5}x + 4$$

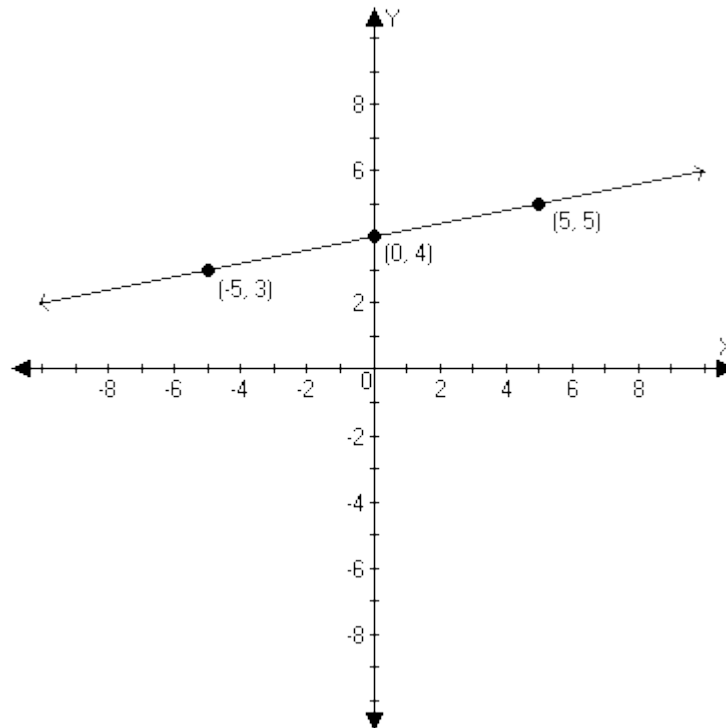
$$y = \frac{1}{5}(5) + 4$$

$$y = 1 + 4$$

$$y = 5$$

ordered pair is  $(5, 5)$

Plot the ordered pairs and draw the line through the points



Exercise 3: Graph  $2x - 3y = -9$ .

First, determine some ordered pairs by selecting values for  $x$  or  $y$ .

$$x = 0$$

$$\begin{aligned} 2x - 3y &= -9 \\ 2(0) - 3y &= -9 \\ -3y &= -9 \\ y &= -9 \div -3 \\ y &= 3 \end{aligned}$$

ordered pair is  $(0, 3)$

$$y = 0$$

$$\begin{aligned} 2x - 3y &= -9 \\ 2x - 3(0) &= -9 \\ 2x &= -9 \\ x &= -9 \div 2 \\ x &= -4.5 \end{aligned}$$

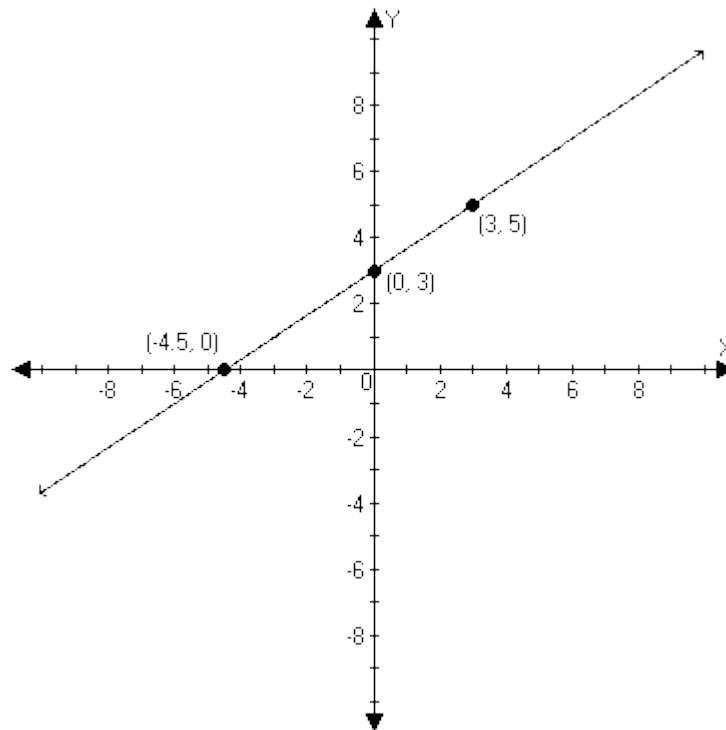
ordered pair is  $(-4.5, 0)$

$$x = 3$$

$$\begin{aligned} 2x - 3y &= -9 \\ 2(3) - 3y &= -9 \\ 6 - 3y &= -9 \\ -3y &= -9 - 6 \\ -3y &= -15 \\ y &= -15 \div -3 \\ y &= 5 \end{aligned}$$

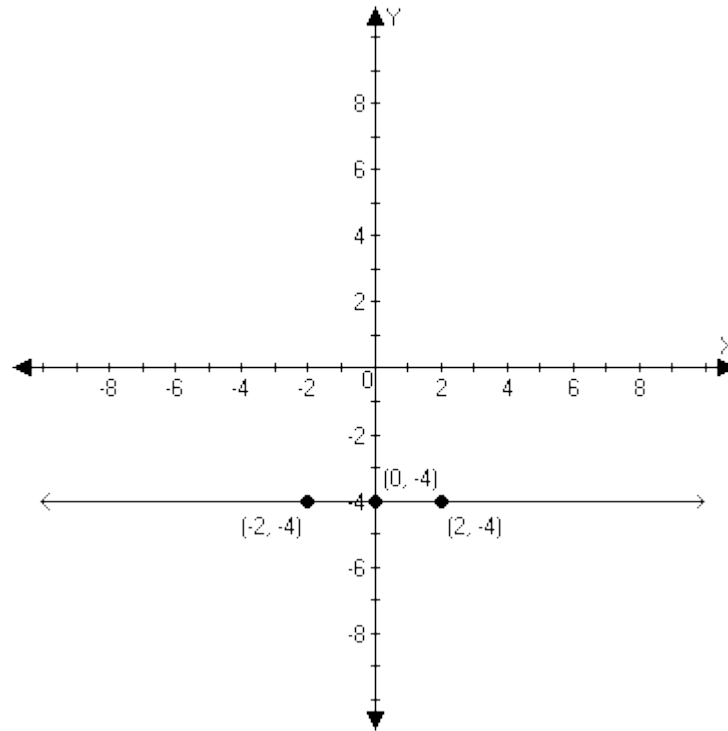
ordered pair is  $(3, 5)$

Plot the ordered pairs and draw the line through the points



Exercise 4: Graph  $y = -4$ .

In this equation,  $y$  will always be  $-4$  no matter what is the value of  $x$ . So the graph would be a horizontal line at  $y = -4$ .



Exercise 5: Graph  $x = 5$ .

In this equation,  $x$  will always be 5 no matter what is the value of  $y$ . So the graph would be a vertical line at  $x = 5$ .

