

Module 7 Lesson 1

Try This 11 Possible Solutions

TT 14. Any line can be graphed as long as there are two points. A table can be created to find convenient points to graph for each line. Begin by rearranging.

$$x + 2y = 5$$

$$2y = -x + 5$$

$$y = -\frac{1}{2}x + \frac{5}{2}$$

Create a table of values.

x	$y = -\frac{1}{2}x + \frac{5}{2}$
-1	3
0	2.5
1	2
2	1.5
3	1

Select two points from the table that can be graphed easily. For example, $(-1, 3)$ and $(3, 1)$ could be selected.

For the other equation, the x-intercept can be found by substituting $y = 0$.

$$3x - 2y = 9$$

$$3x - 2 \cdot 0 = 9$$

$$3x = 9$$

$$\frac{3x}{3} = \frac{9}{3}$$

$$x = 3$$

The x-intercept is $(3, 0)$.

Rearrange the equation to obtain a slope.

$$3x - 2y = 9$$

$$-2y = -3x + 9$$

$$\frac{-2y}{-2} = \frac{-3x}{-2} + \frac{9}{-2}$$

$$y = \frac{3}{2}x - \frac{9}{2}$$

The slope is $\frac{3}{2}$.

The graph of the two linear functions is shown.

