

Exercise 7

Write an equation for line in Figure 2.

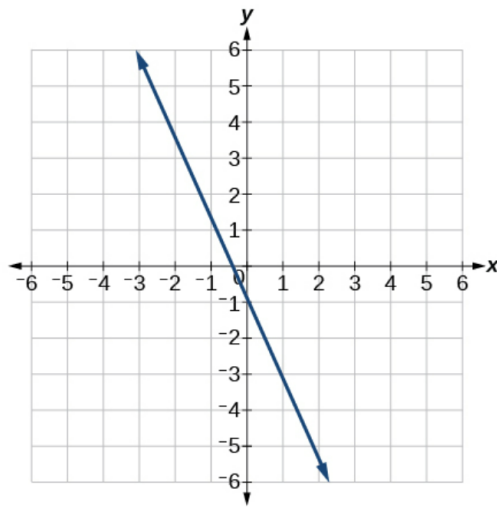
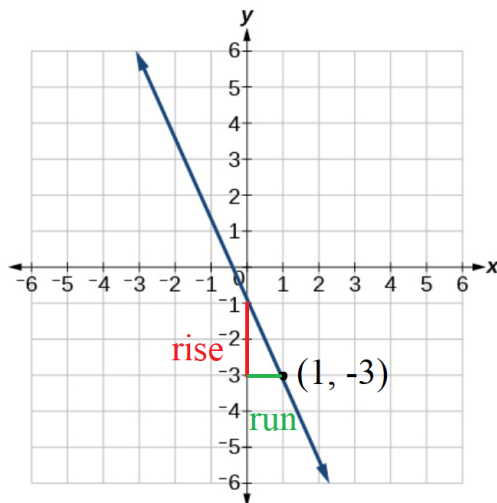


Figure 2

Solution

Identify one point on this line and determine the slope.



The slope is the ratio of rise to run.

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{-2}{1} = -2$$

Use the point-slope formula to get the equation of the line.

$$y - (-3) = -2(x - 1)$$

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

$$y = -2x - 1$$