

Exercise 15

For the following exercises, find the x - and y - intercepts of the given equation

$$7x + 9y = -63$$

Solution

Determine the x -intercept by setting $y = 0$ and solving the equation for x .

$$7x + 9(0) = -63 \quad \rightarrow \quad 7x = -63 \quad \rightarrow \quad x = -9$$

Therefore, the x -intercept is $(-9, 0)$. Determine the y -intercept by setting $x = 0$ and solving the equation for y .

$$7(0) + 9y = -63 \quad \rightarrow \quad 9y = -63 \quad \rightarrow \quad y = -7$$

Therefore, the y -intercept is $(0, -7)$.

