

Example 2

Question

A line has slope -3 and goes through the point $(1, 3)$. What is its equation?

Answer

The slope is $m = 3$ but we do not know the value for b . Using the point $(1, 3)$ to solve for b we have:

$$y = 3x + b$$

$$3 = -3(1) + b$$

$$6 = b$$

So, the equation of the line is $y = -3x + 6$.