



A **linear equation** is an equation where the highest power of the variable is **1**.

It usually looks like:

$$y = mx + b$$

- Where:
1. m = slope (how steep the line is)
 2. b = y-intercept (where the line crosses the y-axis)

Example 1: Simple Linear Equation

$$y = 2x + 3$$

Solve for y when $x = 4$

Substitute $x = 4$:

$$y = 2(4) + 3 = 2(4) + 3 = 8 + 3 = 11$$

So, when $x = 4$, the answer is:

$y = 11$

Example 2: Solve for x

$3x + 5 = 20$

Step 1: Subtract 5 from both sides

$3x = 15$

Step 2: Divide both sides by 3

$x = 5$

Practice Question

Try solving this:

$$5x - 7 = 185x - 7 = 185x - 7 = 18$$

Hint:



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