



Vocabulary: Solving Two-Step Equations



Vocabulary

- **Equation** – a mathematical sentence that states that two expressions are equal.
 - The two equal expressions in an equation are written with an *equals sign* (=) between them.
 - For example, the equation $3x + 4 = 7$ shows that $3x + 4$ and 7 are equal.
- **Expression** – a combination of one or more numbers, one or more variables, and one or more arithmetic operations.
 - For example, $x - 2$, $8m$, $r \div 6$, 7 , $3x + 4$, and $(2 + (\frac{5}{11})^2 - 0.3)$ are all expressions.
- **Solution** – the answer to a problem.
 - For example, 1 is the solution of the equation $3x + 4 = 7$ because it makes the equation true: $3(1) + 4 = 7$.
- **Solve** – to find the answer to a problem.
 - For example, to solve the equation $3x + 4 = 7$, isolate x to find the value of x that makes the equation true.

$$3x + 4 = 7$$

$$3x + 4 - 4 = 7 - 4$$

$$3x = 3$$

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

$$x = 1$$

Isolate $3x$ by subtracting 4 from each side.

Simplify.

Isolate x by dividing each side by 3 .

Simplify. The solution is 1 .

- For example, to solve the formula $A = lw$ for l , isolate l .

$$A = lw$$

$$\frac{A}{w} = l$$

Isolate l by dividing each side by w .

