

Lesson 4: Solving Two-Step Equations

Goals:

- Solve two-step equations.
- Verify the solution to a two-step equation.
- Solve word problems that involve two math operations.

Some equations involve more than one operation and require more than one step to solve. The following equations may require you to add or subtract and then also multiply or divide.

Example 1

$$3x + 5 = 11$$

$$3x + 5 - 5 = 11 - 5$$

$$3x = 6$$

$$\frac{3x}{3} = \frac{6}{3}$$

$$x = 2$$

Example 2

$$9 = 6x - 93$$

$$9 + 93 = 6x$$

$$102 = 6x$$

$$\frac{102}{6} = \frac{6x}{6}$$

$$17 = x$$

Example 3

$$12 + 5x = 97$$

$$12 - 12 + 5x = 97 - 12$$

$$5x = 85$$

$$5x = 85$$

$$\frac{5x}{5} = \frac{85}{5}$$

$$x = 17$$