

Solving One-Step Equations using Multiplication or Division

Sometimes an equation can be solved by multiplying or dividing each side by the same number.

Example 1

$$3x = 12$$

$$\frac{3x}{3} = \frac{12}{3}$$

$$x = 4$$

Verify the solution

$$3(4) = 12$$

$$12 = 12 \checkmark$$

Example 2

$$28 = -4x$$

$$\frac{28}{-4} = \frac{-4x}{-4}$$

$$-7 = x$$

Verify the solution

$$28 = -4(-7)$$

$$28 = 28 \checkmark$$

Example 3

$$\frac{x}{5} = 3$$

$$5 \times \frac{x}{5} = 3 \times 5$$

$$x = 15$$

Verify the solution

$$\frac{15}{5} = 3$$

$$3 = 3 \checkmark$$