

Practice with Examples

For use with pages 144–149

GOAL

Use two or more steps to solve a linear equation

EXAMPLE 1**Solving a Linear Equation**Solve $-3x - 4 = 5$.**SOLUTION**To isolate the variable x , undo the subtraction and then the multiplication.

$$-3x - 4 = 5$$

Write original equation.

$$-3x - 4 + 4 = 5 + 4$$

Add 4 to each side.

$$-3x = 9$$

Simplify.

$$\frac{-3x}{-3} = \frac{9}{-3}$$

Divide each side by -3 .

$$x = -3$$

Simplify.

The solution is -3 . Check this in the original equation.**Exercises for Example 1**

Solve the equation.

1. $5y + 8 = -2$

2. $7 - 6m = 1$

3. $\frac{x}{4} - 1 = 5$