General Equations-Part I

Objective A To solve an equation of the form ax + b = c

In solving an equation of the form ax + b = c, the goal is to rewrite the equation in the form *variable = constant*. This requires the application of both the Addition and the Multiplication Properties of Equations.

Solve: $\frac{3}{4}x - 2 = -11$

The goal is to write the equation in the form *variable = constant*.

$$\frac{3}{4}x - 2 = -11$$

$\frac{3}{4}x - 2 + 2 = -11 + 2$ • **Add 2 each side of the equation.**

$\frac{3}{4}x = -9$ • **Simplify.**

$\frac{4}{3} \cdot \frac{3}{4}x = \frac{4}{3}(-9)$ • **Multiply each side of the equation by $\frac{4}{3}$.**

$x = -12$ • **The equation is of the form *variable = constant*.**

The solution is –12.