

LESSON
8-2

Solving Two-Step Equations

Success for English Learners

$$\begin{array}{c} \text{Expression} \\ \overbrace{5x - 3} \\ \text{Equation} \end{array} = 32$$

$$\begin{array}{c} \text{Expression} \\ \overbrace{x + 12} \\ \text{Equation} \end{array} = \underbrace{-3}_4$$

Problem 1

Steps to form the expression $5x - 3$:

1. Multiply a variable by 5.
2. Subtract 3.

Steps to solve the equation $5x - 3 = 32$:

- A. Add 3 to both sides: $5x = 35$
 B. Divide both sides by 5. $x = 7$

Problem 2

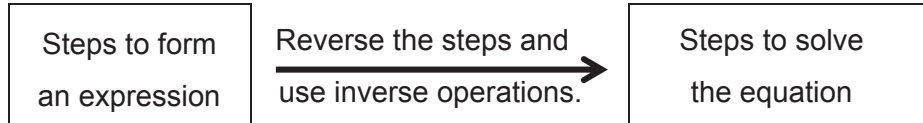
Steps to form the expression $\frac{x + 12}{4}$:

1. Add 12 to a variable.
2. Divide by 4.

Steps to solve the equation $\frac{x + 12}{4} = -3$:

- A. Multiply both sides by 4: $x + 12 = -12$
 B. Subtract 12 from both sides: $x = -24$

Here is the pattern:



Answer part a and part b for each equation.

1. $13x + 2 = 41$

a. List the steps to form $13x + 2$.

b. List the steps to solve $13x + 2 = 41$. Solve.

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

a. List the steps to form $\frac{x - 3}{5}$.

b. List the steps to solve $\frac{x - 3}{5} = -1$. Solve.
