



# 1-2 Reteach to Build Understanding

## Solving Linear Equations

An equation is a mathematical sentence with an equal sign. If a sentence is true for a value of the variable in the equation, that value is called a solution of the equation. For  $x + 2 = 8$ , the solution is 6 because when 6 is substituted in the equation for  $x$ , the equation is true:  $6 + 2 = 8$ .

1. Draw a line to match each lettered step for solving the equation  $x + 3(2x - 1) = 11$  with a justification.

$$x + 3(2x - 1) = 11$$

- |    |  |                               |
|----|--|-------------------------------|
| a. | $x + 6x - 3 = 11$                        | Division Property of Equality |
| b. | $7x - 3 = 11$                            | Combine Like Terms            |
| c. | $7x - 3 + 3 = 11 + 3$                    | Distributive Property         |
| d. | $\frac{7x}{7} = \frac{14}{7}$<br>$x = 2$ | Addition Property of Equality |

2. Describe and correct the error Cameron made when solving the equation  $6x - 2(x - 5) = -2$ . Place an X next to the incorrect step and describe his error.

$$6x - 2(x - 5) = -2 \quad \underline{\hspace{10em}}$$

$$6x - 2x - 10 = -2 \quad \underline{\hspace{10em}}$$

$$4x - 10 = -2 \quad \underline{\hspace{10em}}$$

$$4x - 10 + 10 = -2 + 10 \quad \underline{\hspace{10em}}$$

$$\frac{4x}{4} = \frac{8}{4} \quad \underline{\hspace{10em}}$$

$$x = 2 \quad \underline{\hspace{10em}}$$

3. In the table below, show the solution of  $7x - 10 + 4x = 34$  by completing the missing expressions and equations in the steps.

Step	Reason
$7x - 10 + 4x = 34$	Given equation
$\underline{\hspace{2em}} = 34$	Combine like terms.
$\underline{\hspace{2em}} = 34 + 10$	Addition property of equality.
$\underline{\hspace{2em}}$	Simplify.
$\underline{\hspace{2em}}$	Division property of equality.
$x = \underline{\hspace{2em}}$	Simplify.