

## SKILL

69

**Skills Readiness****Solve Multi-Step Equations**

To solve an equation, you need to isolate the variable on one side of the equals sign. Follow the order of operations in reverse to solve a multi-step equation. That is, add and subtract before you multiply or divide. Sometimes, you need to use the Distributive Property before you use inverse operations.

Example: Solve  $9x - 6 = 21$ .


$$9x - 6 = 21$$

$$\begin{array}{r} +6 \quad +6 \\ 9x \quad = 27 \end{array}$$

 Add 6 to both sides.

$$\frac{9x}{9} = \frac{27}{9}$$

$$x = 3$$

 Divide both sides by 9.**Practice on Your Own****Solve.**

1.  $3x - 2 = 10$

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2.  $7m + 3 = 45$

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3.  $12 + \frac{t}{3} = 17$

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4.  $\frac{p}{4} - 3 = -5$

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5.  $-12 - 9y = -20$

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6.  $26 = 5c - 4$

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7.  $3\left(\frac{x}{3} + 2\right) = -9$

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8.  $5(2n - 1) = -5$

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9.  $2(h + 3) + 5h = -3$

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**Check****Solve.**

10.  $8x + 1 = 17$

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11.  $-3 + \frac{d}{5} = -7$

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12.  $-12 + 6g = 14$

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13.  $18 = \frac{t}{2} + 15$

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14.  $-3(x + 4) = -5$

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15.  $5(z - 2) + 3z = 14$

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