

Reteaching 7-1

Solving Two-Step Equations

Solve $\frac{k}{5} - 9 = -7$.

$$\frac{k}{5} - 9 = -7$$

$$\frac{k}{5} - 9 + 9 = -7 + 9 \quad \text{Add 9 to each side.}$$

$$\frac{k}{5} = 2 \quad \text{Simplify.}$$

$$\frac{k}{5} \cdot 5 = 2 \cdot 5 \quad \text{Multiply each side by 5.}$$

$$k = 10 \quad \text{Simplify.}$$

Complete the example.

1. $4n + 13 = 1$

Subtract 13 from each side.

Simplify.

Divide each side by 4.

Simplify.

Solve each equation.

2. $3x - 5 = 10 \quad x =$ _____

3. $\frac{n}{2} + 10 = 7 \quad n =$ _____

4. $\frac{m}{7} - 9 = -5 \quad m =$ _____

5. $5w - 2 = -12 \quad w =$ _____

6. $4a + 12 = -8 \quad a =$ _____

7. $\frac{b}{3} + 8 = -7 \quad b =$ _____

Reteaching 7-2

Solving Multi-Step Equations

Solve $6 - 2(x + 5) = 8$

$$6 - 2(x + 5) = 8$$

$$6 - 2x - 10 = 8$$

$$-2x - 4 = 8$$

$$-2x - 4 + 4 = 8 + 4$$

$$-2x = 12$$

$$\frac{-2x}{-2} = \frac{12}{-2}$$

$$x = -6$$

Distribute.

Simplify. Think of $6 - 2x$ as $6 + (-2x)$. Then subtract $6 - 10$.

Add 4 to each side.

Simplify.

Divide each side by -2 .

Simplify.

Solve each equation.

1. $3(a - 4) = 9$

Distribute.

Add 12 to each side.

Simplify.

Divide each side by 3.

Simplify.

Solve each equation.

2. $n + 5n = 30$ $n =$ _____

3. $y - 4y = 33$ $y =$ _____

4. $12 = 4(b - 2)$ $b =$ _____

5. $-3(k - 4) = -6$ $k =$ _____

6. $m - 3m + 3 = 11$ $m =$ _____

7. $2(x - 9) + 5 = 1$ $x =$ _____

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Reteaching 7-5**Solving Equations With Variables on Both Sides**

Solve $4(n - 5) + 2 = 3n - 4$.

$$4(n - 5) + 2 = 3n - 4$$

$$4n - 20 + 2 = 3n - 4$$

$$4n - 18 = 3n - 4$$

$$4n - 3n - 18 = 3n - 3n - 4$$

$$n - 18 = -4$$

$$n - 18 + 18 = -4 + 18$$

$$n = 14$$

Distribute.

Simplify.

Subtract $3n$ from each side.

Simplify.

Add 18 to each side.

Simplify.

Solve each equation.

1. $7x + 9 = 4x$

2. $8m - 5 = 5m + 7$

$x = \underline{\hspace{2cm}}$

$m = \underline{\hspace{2cm}}$

3. $k + k + k = k + 18$

4. $3(n - 5) = -2n$

$k = \underline{\hspace{2cm}}$

$n = \underline{\hspace{2cm}}$

5. $4(y - 9) = 3(2y - 8)$

6. $6(z - 2) + 3 = 3z - 15$

$y = \underline{\hspace{2cm}}$

$z = \underline{\hspace{2cm}}$

7. $x + 7x + 15x = 29x + 18$

8. $8(7 - p) - 8 = -16(p - 2)$

$x = \underline{\hspace{2cm}}$

$p = \underline{\hspace{2cm}}$