

*Tues  
H/W*

LESSON

**Reteach**

**3-6**

**Solving Equations Containing Integers**

- You can use addition to solve an equation involving subtraction.

Addition undoes subtraction. Adding the same number to both sides of the equation keeps the equation balanced.

$$\begin{aligned} x - 5 &= -6 \\ x - 5 + 5 &= -6 + 5 \\ x &= -1 \end{aligned}$$

**Check**

$$\begin{aligned} x - 5 &= -6 \\ -1 - 5 &\stackrel{?}{=} -6 \\ -6 &\stackrel{?}{=} -6 \checkmark \end{aligned}$$

- You can use subtraction to solve an equation involving addition.

Subtraction undoes addition. Subtracting the same number from both sides of the equation keeps the equation balanced.

$$\begin{aligned} n + 4 &= -15 \\ n + 4 - 4 &= -15 - 4 \\ n &= -19 \end{aligned}$$

**Check**

$$\begin{aligned} n + 4 &= -15 \\ -19 + 4 &\stackrel{?}{=} -15 \\ -15 &\stackrel{?}{=} -15 \checkmark \end{aligned}$$

*★ Don't forget to check your answer!*

**Solve. Check your answer.**

1.  $p - 9 = -3$

$p - 9 + \underline{\hspace{1cm}} = -3 + \underline{\hspace{1cm}}$

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2.  $w - 2 = -14$

$w - 2 + \underline{\hspace{1cm}} = -14 + \underline{\hspace{1cm}}$

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3.  $x - 12 = -5$

$x - 12 + \underline{\hspace{1cm}} = -5 + \underline{\hspace{1cm}}$

\_\_\_\_\_

4.  $f - 8 = 6$

$f - 8 + \underline{\hspace{1cm}} = 6 + \underline{\hspace{1cm}}$

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5.  $6 = m - 7$

\_\_\_\_\_

6.  $-4 = s - 10$

\_\_\_\_\_

7.  $-8 = y - 2$

\_\_\_\_\_

8.  $a + 19 = 7$

\_\_\_\_\_

9.  $b + 15 = -9$

\_\_\_\_\_

10.  $39 + t = 45$

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11.  $-5 = x + 7$

\_\_\_\_\_

12.  $-2 = k + 11$

\_\_\_\_\_

13.  $10 = -3 + j$

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**LESSON**

**Reteach**

**3-6 Solving Equations Containing Integers (continued)**

- You can use division to solve an equation involving multiplication.

Division undoes multiplication. Dividing both sides of the equation by the same number keeps the equation balanced.

$$3y = -9$$

$$\frac{3y}{3} = \frac{-9}{3}$$

$$y = -3$$

**Check**

$$3y = -9$$

$$3 \cdot (-3) \stackrel{?}{=} -9$$

$$-9 \stackrel{?}{=} -9 \checkmark$$

- You can use multiplication to solve an equation involving division.

Multiplication undoes division. Multiplying both sides of an equation by the same number keeps the equation balanced.

$$\frac{a}{-5} = -8$$

$$-5 \cdot \frac{a}{-5} = -8 \cdot (-5)$$

$$a = 40$$

**Check**

$$\frac{a}{-5} = -8$$

$$\frac{40}{-5} \stackrel{?}{=} -8$$

$$-8 \stackrel{?}{=} -8 \checkmark$$

**Solve. Check your answer.**

14.  $5g = -35$

$$\frac{5g}{5} = \frac{-35}{5}$$

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15.  $-8y = -96$

$$\frac{-8y}{-8} = \frac{-96}{-8}$$

\_\_\_\_\_

16.  $54 = -6f$

$$\frac{54}{-6} = \frac{-6f}{-6}$$

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17.  $3e = -33$

\_\_\_\_\_

18.  $-49 = 7n$

\_\_\_\_\_

19.  $-75 = -5c$

\_\_\_\_\_

20.  $\frac{n}{4} = -15$

\_\_\_\_\_

21.  $\frac{m}{-6} = -9$

\_\_\_\_\_

22.  $\frac{s}{-10} = 8$

\_\_\_\_\_

23.  $4 = \frac{w}{-6}$

\_\_\_\_\_

24.  $9 = \frac{z}{5}$

\_\_\_\_\_

25.  $-11 = \frac{h}{6}$

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