

## Variables and Equations

## Solving One-Step Equations (Addition and Subtraction)

$$\begin{aligned}12 + x &= -24 \\12 + (-12) + x &= -24 + (-12) \\x &= -36\end{aligned}$$

Solve each equation for the given variable.

1.  $-13 + b = 31$

2.  $n + \frac{3}{8} = \frac{5}{8}$

3.  $x - 17 = -27$

4.  $27 = v + (-5)$

5.  $-4 = x - 3$

6.  $c - 3 = 4.7$

7.  $a + 5.7 = 18.9$

8.  $12 - (-u) = 17$

9.  $-200 = b + (-73)$

10.  $-13 + x = 18$

11.  $-t + (-7) = -56$

12.  $3 + x = 9$

13.  $z + 3.5 = 4.7$

14.  $12 + (-g) = 10$

15.  $y - 12 = 15$

16.  $2\frac{1}{3} + r = 4\frac{2}{9}$

17.  $x + 2 = 2(3 - 4)$

18.  $s - 5 = 6 + (-8)$

19.  $-13 = n + (-39)$

20.  $r = 4.4 + 3.9$

## Variables and Equations

## Solving One-Step Equations (Multiplication and Division)

$$3x = 15$$

$$\frac{3x}{3} = \frac{15}{3}$$

$$x = 5$$

$$-\frac{3}{4y} = -6$$

$$-\frac{4}{3} \cdot -\frac{3}{4y} = -6 \cdot \frac{4}{3}$$

$$y = 8$$

Solve each equation for the given variable.

1.  $12.8 = 4b$

2.  $4b = -36$

3.  $-13h = 169$

4.  $-\frac{3}{4} = \frac{n}{16}$

5.  $10x = -100$

6.  $4c = 288$

7.  $7x = -63$

8.  $4y = -48$

9.  $6x = -36$

10.  $\frac{8}{k} = \frac{2}{5}$

11.  $-(-90) = -45z$

12.  $-\frac{x}{8} = \frac{1}{4}$

13.  $-50 = 2x$

14.  $\frac{2}{y} = \frac{1}{5}$

15.  $\frac{4}{x} = \frac{2}{9}$

16.  $\frac{x}{6} = \frac{6}{9}$

17.  $-35c = 700$

18.  $-4x = -20$

19.  $-\frac{x}{6} = \frac{2}{3}$

20.  $1.6c = 80$