

Solving Equations
Emphasis on 2-Step Linear Equations

Solve each of the following.

<p>1. $3x + 7 = 19$ $\quad -7 \quad -7$ <hr/> $3x = 12$ $\quad 3 \quad 3$ <hr/> $x = 4$</p>	<p>2. $5h + 4 = 19$ $\quad -4 \quad -4$ <hr/> $5h = 15$ $\quad 5 \quad 5$ <hr/> $h = 3$</p>
<p>3. $7d - 1 = 13$ $\quad +1 \quad +1$ <hr/> $7d = 14$ $\quad 7 \quad 7$ <hr/> $d = 2$</p>	<p>4. $2g - 13 = 3$ $\quad +13 \quad +13$ <hr/> $2g = 16$ $\quad 2 \quad 2$ <hr/> $g = 8$</p>
<p>5. $10 = 7 - m$ $\quad -7 \quad -7$ <hr/> $3 = -m$ $\quad -1 \quad -1$ <hr/> $-3 = m$ OR $m = -3$</p>	<p>6. $11 = 12 - q$ $\quad -12 \quad -12$ <hr/> $-1 = -q$ $\quad -1 \quad -1$ <hr/> $1 = q$ OR $q = 1$</p>
<p>7. $\frac{a}{3} + 4 = 6$ $\quad -4 \quad -4$ <hr/> $\frac{a}{3} = 2$ $\quad 3 \quad 3$ <hr/> $a = 6$</p>	<p>8. $17 = \frac{w}{5} + 13$ $\quad -13 \quad -13$ <hr/> $4 = \frac{w}{5}$ $\quad 5 \quad 5$ <hr/> $20 = w$ OR $w = 20$</p>
<p>9. $\frac{b}{2} - 9 = 11$ $\quad +9 \quad +9$ <hr/> $\frac{b}{2} = 20$ $\quad 2 \quad 2$ <hr/> $b = 40$</p>	<p>10. $-6 = \frac{z}{4} - 3$ $\quad +3 \quad +3$ <hr/> $-3 = \frac{z}{4}$ $\quad 4 \quad 4$ <hr/> $-12 = z$ OR $z = -12$</p>

$$11. 7 = \frac{5}{6}c - 8$$

$$\begin{array}{r} +8 \quad +8 \\ \hline \frac{6}{5} [15 = \frac{5}{6}c] \frac{6}{5} \end{array}$$

$$\boxed{18 = c} \quad \text{OR} \quad \boxed{c = 18}$$

$$12. 10 = \frac{2}{7}n + 4$$

$$\begin{array}{r} -4 \quad -4 \\ \hline \frac{7}{2} [6 = \frac{2}{7}n] \frac{7}{2} \end{array}$$

$$\boxed{21 = n} \quad \text{OR} \quad \boxed{n = 21}$$

$$13. 5.6 = 1.1p + 1.2$$

$$\begin{array}{r} -1.2 \quad -1.2 \\ \hline \end{array}$$

$$\frac{4.4}{1.1} = \frac{1.1p}{1.1}$$

$$\boxed{4 = p} \quad \text{OR} \quad \boxed{p = 4}$$

$$14. 7.2y + 4.7 = 62.3$$

$$\begin{array}{r} -4.7 \quad -4.7 \\ \hline \end{array}$$

$$\frac{57.6}{7.2} = \frac{7.2y}{7.2}$$

$$\boxed{y = 8}$$

$$15. 1.2j - 4.3 = 1.7$$

$$\begin{array}{r} +4.3 \quad +4.3 \\ \hline \end{array}$$

$$\frac{1.2j}{1.2} = \frac{6}{1.2}$$

$$\boxed{j = 5}$$

$$16. 16 - 2.4d = -8$$

$$\begin{array}{r} -16 \quad -16 \\ \hline \end{array}$$

$$\frac{-24}{-2.4} = \frac{-24}{-2.4}$$

$$\boxed{d = 10}$$

$$17. 14.4m - 5.1 = 2.1$$

$$\begin{array}{r} +5.1 \quad +5.1 \\ \hline \end{array}$$

$$\frac{14.4m}{14.4} = \frac{7.2}{14.4}$$

$$\boxed{m = 0.5} \quad \text{OR} \quad \boxed{m = \frac{1}{2}}$$

$$18. -5.3 = 2.2v - 8.6$$

$$\begin{array}{r} +8.6 \quad +8.6 \\ \hline \end{array}$$

$$\frac{3.3}{2.2} = \frac{2.2v}{2.2}$$

$$\boxed{1.5 = \frac{3}{2} = v} \quad \text{OR} \quad \boxed{v = 1.5 = \frac{3}{2}}$$

$$19. \frac{c}{5.3} + 8.3 = 11.3$$

$$\begin{array}{r} -8.3 \quad -8.3 \\ \hline \end{array}$$

$$\frac{c}{5.3} = 3$$

$$\boxed{c = 15.9}$$

$$20. 3.2 + \frac{x}{2.5} = 4.6$$

$$\begin{array}{r} -3.2 \quad -3.2 \\ \hline \end{array}$$

$$\frac{x}{2.5} = 1.4$$

$$\boxed{x = 3.5 = \frac{7}{2}}$$