

## Linear Equations

Solving one linear equation in one variable. Solve.

$$1. 3x - 7 = 6x + 11 \quad \begin{array}{l} -18 = 3x \\ x = -6 \end{array}$$

$$2. x = \frac{2}{3}x - 1 \quad \begin{array}{l} \frac{1}{3}x = -1 \\ x = -3 \end{array}$$

Solve for the indicated variable in terms of the other(s).

$$3. P = 2l + 2w \quad P - 2w = 2l$$
$$l = \frac{1}{2}P - w$$

$$4. R = \frac{2}{3}(T - 6) \quad 3R = 2T - 12$$
$$T = \frac{1}{2}(3R + 12)$$

Solution of a one variable equation reducible to a linear equation. Solve and check.

$$5. \frac{x-1}{x+3} = \frac{7}{3} \quad \begin{array}{l} 3x - 3 = 7x + 21 \\ -24 = 4x \\ -6 = x \end{array}$$

$$6. \frac{n}{n-4} = 7 \quad \begin{array}{l} n = 7n - 28 \\ -6n = -28 \\ n = 4\frac{2}{3} \end{array}$$