

Rewriting Equations and Formulas

① Solve the equation $2y + 5x = 6$ for y .

$$\begin{array}{r} 2y + 5x = 6 \\ -5x \quad -5x \\ \hline 2y = -5x + 6 \\ \frac{2y}{2} = \frac{-5x}{2} + \frac{6}{2} \end{array}$$

$$y = -\frac{5}{2}x + 3$$

② Solve $S = \pi r^2 + \pi r l$ for l . ③ Solve $C = \frac{5}{9}(F - 32)$ for F .

$$\begin{array}{r} S = \pi r^2 + \pi r l \\ -\pi r^2 \quad -\pi r^2 \\ \hline S - \pi r^2 = \pi r l \\ \frac{S - \pi r^2}{\pi r} = \frac{\pi r l}{\pi r} \end{array}$$

$$\frac{S - \pi r^2}{\pi r} = l$$

$$\begin{array}{r} C = \frac{5}{9}(F - 32) \\ \frac{9}{5} \cdot C = \frac{9}{5} \cdot \frac{5}{9}(F - 32) \\ \frac{9}{5}C = F - 32 \\ +32 \quad +32 \\ \hline \frac{9}{5}C + 32 = F \end{array}$$

$$\frac{9}{5}C + 32 = F$$