

Remember, if you have a fractional coefficient, multiply by the reciprocal. You can expect some problems in the section to have rational (fractional) answers.

Practice:

$$1) \frac{w-6}{3} = 8 \cdot 3$$

$$w-6 = 24$$

$$\begin{array}{r} w-6 = 24 \\ +6 \quad +6 \\ \hline \end{array}$$

$$w = 30$$

$$2) \frac{2}{3}r + 16 = 8$$

$$\begin{array}{r} \frac{2}{3}r + 16 = 8 \\ -16 \quad -16 \\ \hline \frac{2}{3}r = -8 \\ \cdot \frac{3}{2} \quad \cdot \frac{3}{2} \\ \hline \end{array}$$

$$r = -12$$

$$3) -2n + 5 = 20$$

$$\begin{array}{r} -2n + 5 = 20 \\ -5 \quad -5 \\ \hline -2n = 15 \\ \cdot \frac{-1}{2} \quad \cdot \frac{-1}{2} \\ \hline \end{array}$$

$$n = -\frac{15}{2} \text{ or } -7\frac{1}{2}$$

$$4) \frac{g+7}{4} = -2 \cdot 4$$

$$g+7 = -8$$

$$\begin{array}{r} g+7 = -8 \\ -7 \quad -7 \\ \hline \end{array}$$

$$g = -15$$

$$5) -\frac{5}{8}u + 8 = 12$$

$$\begin{array}{r} -\frac{5}{8}u + 8 = 12 \\ -8 \quad -8 \\ \hline -\frac{5}{8}u = 4 \\ \cdot \frac{-8}{5} \quad \cdot \frac{-8}{5} \\ \hline \end{array}$$

$$u = -32$$

$$6) 6p + 9 = -5$$

$$\begin{array}{r} 6p + 9 = -5 \\ -9 \quad -9 \\ \hline 6p = -14 \\ \cdot \frac{1}{6} \quad \cdot \frac{1}{6} \\ \hline \end{array}$$

$$p = -\frac{7}{3} \text{ or } -2\frac{1}{3}$$