

A few problems from
the online assignment
"Extra Quadratic
Solve for X"

$$x^2 + 4x + 3 = x + 1$$

$$\begin{array}{r} -1 \quad -1 \\ \hline \end{array}$$

$$\begin{array}{r} x^2 + 4x + 2 = x \\ -x \quad -x \\ \hline \end{array}$$

$$x^2 + 3x + 2 = 0$$

$$(x + 2)(x + 1) = 0$$

$$x + 2 = 0 \quad x + 1 = 0$$

$$\boxed{x = -2 \quad x = -1}$$

$$x^2 + 7x + 1 = 3x + 1$$

$$\begin{array}{r} \\ \\ \hline x^2 + 7x = 3x \\ \\ \\ \\ \hline x^2 + 4x = 0 \end{array}$$

$$x(x + 4) = 0$$

$$x = 0$$

$$x + 4 = 0$$
$$x = -4$$

$$-x-8 = x+4$$

$$\begin{array}{r} +x \quad +x \\ \hline -8 = 2x + 4 \\ -4 \quad -4 \\ \hline -12 = 2x \\ \frac{-12}{2} = \frac{2x}{2} \\ \boxed{-6 = x} \end{array}$$

$$x^2 + 5x + 5 = x + 2$$

$$\begin{array}{r} \\ \\ \hline x^2 + 5x + 3 = x \\ \\ \\ \hline x^2 + 4x + 3 = 0 \end{array}$$

$$x^2 + 4x + 3 = 0$$

$$(x + 3)(x + 1) = 0$$

$$x + 3 = 0$$

$$x = -3$$

$$x + 1 = 0$$

$$x = -1$$