

#7: Checking your Solutions

3-12

c.) $5x + 4 - 2x = -(x + 8)$

$$\begin{array}{r} 3x + 4 = -x - 8 \\ + x \qquad + x \\ \hline 4x + 4 = -8 \\ -4 \qquad -4 \\ \hline 4x = -12 \\ \frac{4x}{4} = \frac{-12}{4} \end{array}$$

$x = -3$

$$\begin{aligned} 5(-3) + 4 - 2(-3) &= -[(-3) + 8] \\ -15 + 4 + 6 &= -(5) \\ -11 + 6 &= -5 \\ -5 &= -5 \quad \checkmark \end{aligned}$$

(1) Solve the equation.

(2) Substitute solution into original equation - use (1)

(3) Simplify both sides of equation.

(4) If solution checks, you are done!

If not, go back and find mistakes!