

HW: Multistep Equations Worksheet

$$3 + 5(2x + 7) = -10$$

$$\underline{3} + 10x + \underline{35} = -10$$

$$\begin{array}{r} 38 + 10x = -10 \\ -38 \quad -38 \\ \hline \end{array}$$

$$\frac{10x}{10} = \frac{-48}{10}$$

$$x = -\frac{48}{10}$$

$$x = -\frac{24}{5}$$

$$-x - 4(5 - 3x) = 9$$

$$\begin{array}{r} -x - 20 + 12x = 9 \\ +20 \qquad \qquad \qquad +20 \end{array}$$

$$-x + 12x = 29$$

$$\frac{11x}{11} = \frac{29}{11}$$

$$x = \frac{29}{11}$$

$$1) -2x + 5(4x - 2) = 9$$

$$2) 3(5x - 1) - 4 = 23$$

$$3) (2x + 1) + (6x - 5) - (4x - 3) = -3$$

$$4) 8 - 2(3n + 8) = -26$$

$$5) 4 + 5(a + 3) - 2(2a - 1) = 21$$

$$1) -2x + 5(4x - 2) = 9$$

$$-2x + 20x - 10 = 9$$

+10 +10

$$-2x + 20x = 19$$

$$\frac{18x}{18} = \frac{19}{18}$$

$$x = \frac{19}{18}$$

$$2) 3(5x - 1) - 4 = 23$$

$$15x - \underline{3} - \underline{4} = 23$$

$$15x - 7 = 23$$

+7 +7

$$\frac{15x}{15} = \frac{30}{15}$$

$$x = 2$$

$$3) (2x + 1) + (6x - 5) - (4x - 3) = -3$$

$$\underline{2x + 1} + \underline{6x - 5} - \underline{4x + 3} = -3$$

$$4x - 1 = -3$$

$$\begin{array}{r} 4x - 1 = -3 \\ + 1 \quad + 1 \\ \hline 4x = -2 \\ \frac{4x}{4} = \frac{-2}{4} \end{array}$$

$$x = -0.5$$

$$-\frac{1}{2}$$

$$4) 8 - 2(3n + 8) = -26$$

$$\underline{8} - 6n - \underline{16} = -26$$

$$\begin{array}{r} -6n - 8 = -26 \\ +8 \quad +26 \end{array}$$

$$\hline -6n = -18$$

$$\begin{array}{r} -6 \\ \hline n = 3 \end{array}$$

$$5) 4 + 5(a + 3) - 2(2a - 1) = 21$$

$$4 + \underline{5a} + 15 - \underline{4a} + 2 = 21$$

$$\begin{array}{r} a + 21 = 21 \\ -21 \quad -21 \\ \hline a = 0 \end{array}$$

$$\cancel{\frac{5}{3}} \left(\cancel{\frac{3}{5}} (x+2) \right) = \cancel{12}^4 \cancel{\frac{5}{2}}$$

$$\begin{array}{r} x+2 = 20 \\ -2 \quad -20 \\ \hline x = 18 \end{array}$$