

W-A1 Algebra 1

Week 10

11/8

$$1.) \quad 8(x-3) = 96$$

$$8x - 24 = 96$$

$$+24 \quad +24$$

$$\frac{8x}{8} = \frac{120}{8}$$

$$x = 15$$

$$3.) \quad 18 = -5x - 4$$

$$+4 \quad \uparrow \quad \uparrow$$

$$+4$$

$$\frac{22}{-5} = \frac{-5x}{-5}$$

$$x = -\frac{22}{5}$$

$$-3^2(8) = \cancel{(-3)^2(8)}$$

$$2.) \quad -4(2x-9) = -52$$

$$-8x + 36 = -52$$

$$-36 \quad -36$$

$$\frac{-8x}{-8} = \frac{-88}{-8}$$

$$x = 11$$

$$4.) \quad 2(5x+4) + 2(-7x+8) = 44$$

$$10x + 8 - 14x + 16 = 44$$

$$10x - 14x$$

$$-4x + 24 = 44$$

$$-24 \quad -24$$

$$\frac{-4x}{-4} = \frac{20}{-4}$$

$$x = -5$$

$$-(3)^2(8)$$

$$\downarrow \quad \downarrow$$

$$-9(8) = -72$$

$$-5(5n - 2) + 4 = -40 - 7n$$

$$-25n + 10 + 4 = -40 - 7n$$

$$\begin{array}{r} + 10 + 4 \\ + 14 \\ \hline -25n + 14 = -40 - 7n \\ +7n \qquad \qquad \qquad +7n \end{array}$$

$$\begin{array}{r} -18n + 14 = -40 \\ -14 \quad -14 \end{array}$$

$$\begin{array}{r} -18n = -54 \\ \hline -18 \quad -18 \end{array}$$

$$\boxed{n = 3}$$

$$3x - 31 = 7(1 - 5x)$$

$$\begin{array}{r} 3x - 31 = 7 - 35x \\ +35x \qquad \qquad \qquad +35x \end{array}$$

$$\begin{array}{r} 38x - 31 = 7 \\ +31 \quad +31 \end{array}$$

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

$$\boxed{x = 1}$$

1.) Distribute
"slap"

2.) Simplify
"combine like terms"

Be racist ñ

3.) opposite sides
of equal -
we do the
opposite to
move them.

4.) Solve

$$1.) -21 - 6n = -(6 + 4n) + n$$

$$-21 - 6n = -6 - 4n + n$$

$$-21 - 6n = -6 \quad \underbrace{-4n + n}_{-3n}$$
$$+3n \quad +3n$$

$$-21 - 3n = -6$$
$$+21 \quad +21$$

$$\frac{-3n}{-3} = \frac{15}{-3}$$

$$n = -5$$

$$2.) 8n + 29 = -7(2n - 5) - 8(-5 + 3n)$$

$$8n + 29 = -14n + 35 + 40 - 24n$$

$$8n + 29 = -38n + 75$$
$$+38n \quad +38n$$

$$46n + 29 = 75$$
$$-29 \quad -29$$

$$\frac{46n}{46} = \frac{46}{46}$$

$$n = 1$$