

M-A1 Algebra 1 Week 10 11/14

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

$$8x + 24 = 96$$

-24 -24

$$\frac{8x}{8} = \frac{72}{8}$$

$$\boxed{x=9}$$

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

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

-36 -36

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

$$\boxed{x=11}$$

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

$$18 = -9x$$

-9 -9

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

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

$$\boxed{10x} + \boxed{8} - \boxed{14x} + \boxed{16} = 44$$

$$-4x + 24 = 44$$

-24 -24

$$\frac{-4x}{-4} = \frac{20}{-4} \quad \boxed{x=-5}$$

Difference between

$$\boxed{-3^2}(8)$$

$$\left\{ \begin{array}{l} -3^2 = -(3)^2 = -(9) = -9 \\ -3^2 \neq (-3)^2 \end{array} \right.$$

$$-3^2 \neq (-3)^2$$

$$(-3)^2 = -3 \cdot -3 = 9$$

$$x + 3 = 8$$

-3 -3

$$x = 5$$

$$x = 8 + 3$$

~~-3~~ ~~3~~

$$x = 8 + 3$$

$$x = 11$$

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

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

$$\begin{array}{r} -25n + 14 = -40 - 7n \\ -14 \quad -14 \end{array}$$

$$\begin{array}{r} -25n = -54 - 7n \\ +7n \quad \quad +7n \end{array}$$

$$\frac{-18n}{-18} = \frac{-54}{-18}$$

$$\boxed{n = 3}$$

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

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

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

$$\frac{38x}{38} = \frac{38}{38}$$

$$\boxed{x = 1}$$

1.) Distribute
"slap"

2.) Simplify
"combine like terms"
Be racist

3.) Opposite sides,
we do the
opposite

4.) Solve

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

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

$$-21 - 6n = -6 - 3n$$

$$\begin{array}{r} +3n \quad \quad \quad +3n \\ \boxed{-21} - 3n = -6 \\ +21 \quad \quad \quad +21 \end{array}$$

$$\begin{array}{r} -3n = 15 \\ \underline{-3} \quad \underline{-3} \end{array}$$

$$\boxed{n = -5}$$

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

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

$$\begin{array}{r} 8n + 29 = -38n + 75 \\ -29 \quad \quad \quad -29 \end{array}$$

$$8n = -38n + 46$$

$$\begin{array}{r} +38n \quad +38n \end{array}$$

$$\begin{array}{r} 46n = 46 \\ \underline{46} \quad \underline{46} \end{array}$$

$$\boxed{n = 1}$$