TH-A1 Algebra 1 Week 10 11/17

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

$8x + 24 = 96$

$-24 \quad -24$

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

$\boxed{x = 9}$

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

$-8x + 36 = -52$

$-36 \quad -36$

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

$\boxed{x = 11}$

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

$+4 \quad +4$

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

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

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

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

$-4x + 24 = 44$

$-24 \quad -24$

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

$\boxed{x = -5}$

$-3^2(8)$

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

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

$\{x + 3 = 8\}$

$-3 \quad -3$

$\boxed{x = 5}$

$x = 3 + 8$

$\boxed{x = 11}$

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

1.) Distribute "slap"

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

2.) simplify "combine like terms" Be racist

$-25n+14 = -40-7n$
$+7n \qquad +7n$

3.) opposite sides, we do the opposite

$-18n+14 = -40$
$-14 \quad -14$

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

4.) Solve

$\boxed{n=3}$

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

$3x-31 = 7-35x$
$+35x \qquad +35x$

$38x-31 = 7$
$+31 \quad +31$

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

$\boxed{x=1}$

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

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

$-4n+n=-3n$

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

$+3n \qquad +3n$

$-21-3n=-6$

$+21 \qquad +21$

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

$\boxed{n=-5}$

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

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

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

$+38n \qquad +38n$

$46n+29=75$

$-29 \quad -29$

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

$\boxed{n=1}$