

**Practice - Linear Equations 3**

Showing both methods... stick with what

works for you!

Solve each of the following.

1)  $4(x-3) = 20$

$4x - 12 = 20$

$4x = 20 + 12$

$\frac{4x}{4} = \frac{32}{4}$   $x = 8$

2)  $-6(x+5) = 12$

$-6x - 30 = 12$

$-6x = 12 + 30$

$\frac{-6x}{-6} = \frac{42}{-6}$   $x = -7$

3)  $\frac{9}{3} = 3 \frac{(2n-7)}{3}$

$3 = 2n - 7$

$3 + 7 = 2n$

$\frac{10}{2} = \frac{2n}{2}$   $5 = n$

4)  $\frac{-36}{6} = \frac{6(x-2)}{6}$

$-6 = x - 2$

$-6 + 2 = x$

$-4 = x$

5)  $-7(x+8) = -14$

$-7x - 56 = -14$

$\frac{-7x}{-7} = \frac{42}{-7}$   $x = -6$

6)  $-2 = -(2n-8)$

$-2 = -2n + 8$

$-2 - 8 = -2n$

$\frac{-10}{-2} = \frac{-2n}{-2}$   $5 = n$

7)  $\frac{24}{6} = 6 \frac{(-x-3)}{6}$

$4 = -x - 3$

$4 + 3 = -x$

$\frac{7}{-1} = \frac{-x}{-1}$   $-7 = x$

8)  $\frac{3(-6n-5)}{3} = \frac{75}{3}$

$-6n - 5 = 25$

$-6n = 25 + 5$

$\frac{-6n}{-6} = \frac{30}{-6}$

$n = -5$

Review of Linear Equations:



**Example 2 - Involving Division**

Solve each of the following:

a)  $\frac{p}{2} - 1 = 18$

$$\frac{p}{2} = 18 + 1$$

$$\frac{p}{2} = 19 \cdot 2 \quad p = 38$$

Check / Verify

$$\frac{p}{2} - 1 = 18$$

$$\frac{38}{2} - 1 = 18$$

$$19 - 1 = 18$$

$$18 = 18 \checkmark$$

b)  $\frac{-x}{12} - 6 = 4$

$$\frac{-x}{12} = 4 + 6$$

$$\frac{-x}{12} = 10 \cdot 12$$

$$\frac{-x}{-1} = \frac{120}{-1}$$

$$x = -120$$

c)  $9 = 7 + \frac{x}{-4}$

$$-4 \cdot 2 = \frac{x}{-4} \cdot -4$$

$$-8 = x$$

" " "



Complete the following:

**Practice - Linear Equations 2A (odds)****Practice - Linear Equations 2B (odds)**

Check your solutions using the key provided.

Outcomes:

PR2 - Model and solve problems involving linear equations

