Today You Need:

*Comp book

*Pencil

Two Step Equations Aug 28

LT: How is the concept of order of operations used in solving equations?

HW: Wednesday's Practice

Warm Up

Simplify and solve

$-3 + x = 5$

$+3 \quad +3$

$x = 8$

$4b - 3(2 - 5b) + 1$

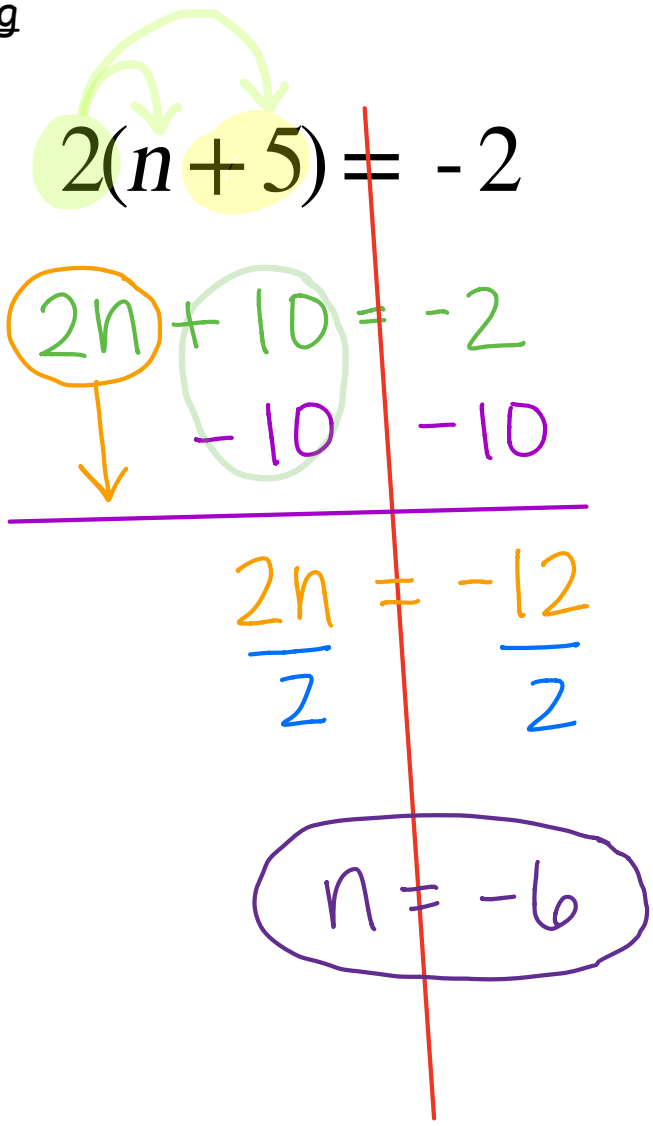
$4b \quad -6 \quad +15b \quad +1$

$19b - 5$

$4 \cdot -7 = \frac{y}{4} \cdot 4$

$-28 = y$

First Thinking



Solve

$$-6+\frac{x}{4}=-5$$

$+6 \quad +6$

$$4\cdot\frac{x}{4}=1\cdot 4$$

$$x=4$$

Verify

$$-6+\frac{x}{4}=-5$$

rewrite + plug in $x=4$

$$-6+\frac{4}{4}=-5$$

$$-6+1=-5$$

$$-5=-5$$

$$-9x+1=-80$$

$-1 \quad -1$

$$\frac{-9x}{-9}=\frac{-81}{-9}$$

$$x=9$$

More Practice

$2x - 1 = 5$

$+1 \quad +1$

$\frac{2x}{2} = \frac{6}{2}$

$x = 3$

$\frac{b}{4} + 5 = 11$

$-5 \quad -5$

$4 \cdot \frac{b}{4} = 6 \cdot 4$

$b = 24$

$4x + 3 = -5$

$-3 \quad -3$

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

$x = -2$

$7 = -3 + \frac{z}{4}$

$+3 \quad +3$

$4 \cdot 10 = \frac{z}{4} \cdot 4$

$40 = z$

$-5 = 4 - 3x$

$-4 \quad -4$

$\frac{-9}{-3} = \frac{-3x}{-3}$

$3 = x$

$-6 + \frac{w}{3} = 2$

$+6 \quad +6$

$3 \cdot \frac{w}{3} = 8 \cdot 3$

$w = 24$

Practice

$-3z+1=7$

$-1 \quad -1$

$\frac{-3z}{-3} = \frac{6}{-3}$

$z = -2$

$23 = -4n-8n+17$

$23 = -12n+17$

$-17 \quad -17$

$\frac{6}{-12} = \frac{-12n}{-12}$

reduce

$\frac{1}{-2} = \frac{6}{-12} = n$

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

Need a challenge?

$-12(x+5)=144$

$-12x-60 = 144$

$+60 \quad +60$

$\frac{-12x}{-12} = \frac{204}{-12}$

$x = -17$