

# December 11, 2014<sup>4th</sup>

## Starter

---

$$\textcircled{1} \quad \cancel{3} \cdot \frac{h}{\cancel{3}} = 12 \cdot \cancel{3} \quad \textcircled{2} \quad -10 = k - (-8)$$

$$h = -36$$

$$\begin{aligned} -10 &= k + \cancel{8} \\ -\cancel{8} &\quad -\cancel{8} \\ -18 &= k \end{aligned}$$

$$\textcircled{3} \quad \frac{-40}{\cancel{5}} = \frac{5x}{\cancel{5}}$$
$$-8 = x$$



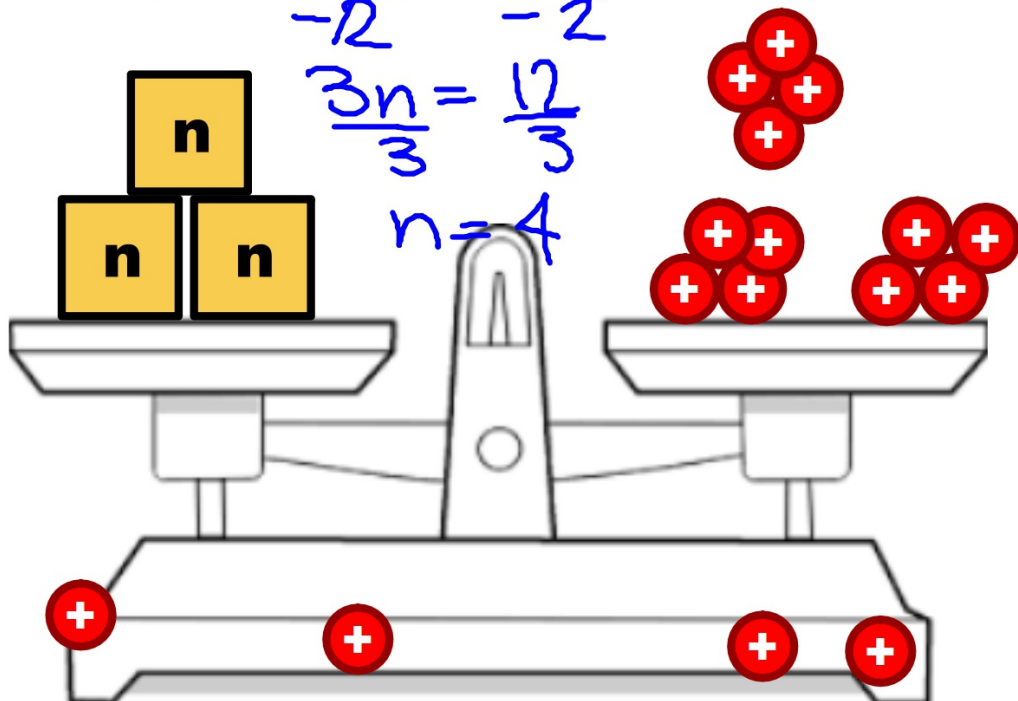
## 12/11 Solving Two-Step Equations

$$3n + 2 = 14$$

$$\begin{array}{r} -2 \\ -2 \end{array}$$

$$3n = 12$$

$$\begin{array}{r} \frac{3n}{3} = \frac{12}{3} \\ n = 4 \end{array}$$



**Undo** means:

1. Use the number on the same side of the equation as the variable
2. Do the opposite operation
3. Do it on both sides

So... undo the add/subtract:

$$x + 5 = -1$$

$-5$       $-5$

$$-4 = n - 9$$

$+9$       $+9$

Undo the multiply:

$$\frac{3b}{3} = \frac{-12}{3}$$

$$\frac{20}{-6} = \frac{-6k}{-6}$$

When there are 2 operations,  
save the one connected to the variable for last.

Connected to x

↓ Do this one first

$$2x + 1 = 3$$

$-1$     $-1$

$$\frac{2x}{2} = \frac{2}{2}$$
$$x = 1$$

Connected to x

↓ Do this one first

$$-10 = -5 + 4n$$

$+5$     $+5$

$$-5 = \cancel{4}n$$
$$\frac{-5}{4} = \frac{\cancel{4}n}{\cancel{4}}$$
$$-1\frac{1}{4} = n$$

$\frac{4 \overline{)5}}{\underline{-4}} \quad 1$

## Try these...

$$\begin{aligned} 3b + 4 &= 16 \\ -4 & \quad -4 \\ \hline 3b &= 12 \\ \frac{3b}{3} &= \frac{12}{3} \\ b &= 4 \end{aligned}$$

$$\begin{aligned} -18 &= -10 + 4k \\ +10 & \quad +10 \\ \hline -8 &= 4k \\ \frac{-8}{4} &= \frac{4k}{4} \\ -2 &= k \end{aligned}$$

$$\begin{aligned} 2x - 5 &= -17 \\ +5 & \quad +5 \\ \hline 2x &= -12 \\ \frac{2x}{2} &= \frac{-12}{2} \\ x &= -6 \end{aligned}$$

$$\begin{aligned} -20 &= 7 + 3n \\ -7 & \quad -7 \\ \hline -27 &= 3n \\ \frac{-27}{3} &= \frac{3n}{3} \\ 9 &= n \end{aligned}$$

**Homework**

Melon WSG

**Due** Monday