

October 18, 2011

WARM-UP: 6pts

$$2x - 3 = 4x + 11$$

$$\begin{array}{r} -4x \quad -4x \\ -2x - 3 = 11 \\ +3 \quad +3 \end{array}$$

$$\begin{array}{r} -2x = 14 \\ \hline -2 \quad -2 \end{array}$$

$$x = -7$$

$$-4 + 5n = 2n - 19$$

$$\begin{array}{r} -2n \quad -2n \\ -4 + 3n = -19 \\ +4 \quad +4 \end{array}$$

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

$$n = -5$$

$$10 - 2k = 16 + k$$

$$\begin{array}{r} -k \quad -k \\ 10 - 3k = 16 \\ -10 \quad -10 \end{array}$$

$$\begin{array}{r} -3k = 6 \\ \hline -3 \quad -3 \end{array}$$

$$k = -2$$

Get out your homework...

## LIME worksheet

$$23) \quad 4 - \underline{6x} - \underline{2x} = -7x + 6$$

$$\begin{array}{r} -8x + 4 = -7x + 6 \\ +7x \qquad +7x \end{array}$$

$$\begin{array}{r} -1x + \cancel{4} = 6 \\ \quad \quad \quad -4 \quad -4 \end{array}$$

$$-x = 2$$

$$x = -2$$

$$16) \quad 2 + 3r = r - \underline{8} - \underline{2}$$

$$\begin{array}{r} 2 + 3r = r - 10 \\ -1r \quad -1r \end{array}$$

$$\begin{array}{r} 2 + 2r = -10 \\ -2 \qquad \quad -2 \end{array}$$

$$\frac{2r}{2} = \frac{-12}{2}$$

$$r = -6$$

## 10/18 - Solving equations with distribution

### Steps:

1. Distribute
- ~~2. Combine like terms~~
3. Get variable on one side
4. Undo add/subtract
5. Undo multiply

$$\begin{aligned}2(3x-1) &= 4x+10 \\6x-2 &= 4x+10 \\-4x \quad -4x & \\2x-2 &= 10 \\+2 \quad +2 & \\2x &= 12 \\ \frac{2x}{2} &= \frac{12}{2} \\x &= 6\end{aligned}$$

Solve each:

$$12 - 4n = 2(6n - 10)$$

$$12 - 4n = 12n - 20$$
$$+4n \quad +4n$$

$$12 = 16n - 20$$
$$+20 \quad +20$$

$$\frac{32}{16} = \frac{16n}{16}$$

$$2 = n$$

$$8y + 3 = -(12 - 13y)$$

$$8y + 3 = -12 + 13y$$
$$-13y \quad -13y$$

$$-5y + 3 = -12$$
$$-3 \quad -3$$

$$-5y = -15$$
$$\frac{-5y}{-5} = \frac{-15}{-5}$$

$$y = 3$$

$$-3(2x + 2) = -3x + 15$$

$$-6x - 6 = -3x + 15$$
$$+3x \quad +3x$$

$$-3x - 6 = 15$$
$$+6 \quad +6$$

$$\frac{-3x}{-3} = \frac{21}{-3}$$

$$x = -7$$

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***Homework:***

**Melon** worksheet

due tomorrow

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