

You need out your warm up & agenda

**Homework: Distribute. Quiz Friday!!!**

Warm Up:

1) Combine Like Terms:  $-3x + 5y + 2x + y$

$-1x + 6y$  or  $-x + 6y$

$\frac{+}{-}$   
 $\begin{array}{r} 5 \\ 1 \\ \hline 6y \end{array}$

2) Simplify:  $6x + 12 - 7x + 8$

$\frac{+}{-}$   
 $\begin{array}{r} -1x + 20 \\ -x + 20 \end{array}$

$\frac{+}{-}$   
 $\begin{array}{r} 12 \\ 8 \\ \hline \end{array}$

3) Find the area:

$\begin{array}{|c|c|} \hline 2 & 8 \\ \hline \end{array}$

$2x + 8$

$2(x + 4)$

Combining Like Terms- Homework

1)  $-2s - 4 + 3y + 4s + 1$

$2s + 3y - 3$

$$\begin{array}{r} + \\ - \\ \hline 4s \quad | \quad 2s \\ \hline + \\ - \\ \hline 1 \quad | \quad 4 \end{array}$$

2)  $-5x + 8y - 2x + 3y + 8$

$-7x + 11y + 8$

4)  $3e + 10 - 12e - 9 + e$

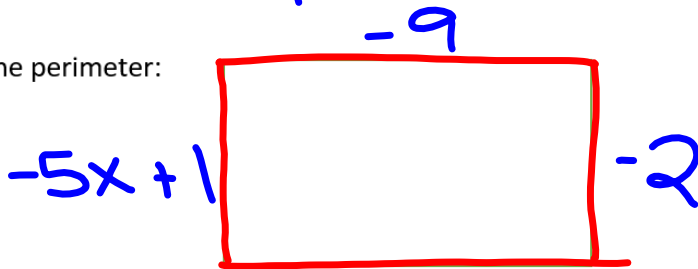
$-8e + 1$

$$\begin{array}{r} + \\ - \\ \hline 3e \quad | \quad -12e \\ \hline + \\ - \\ \hline 1 \quad | \quad -9 \end{array}$$

4)  $-3x + 6y - 2x - 2y$

$-5x + 4y$

5) Find the perimeter:

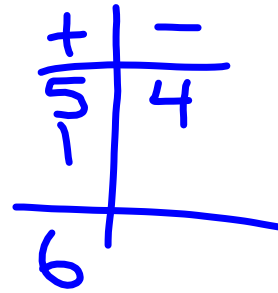
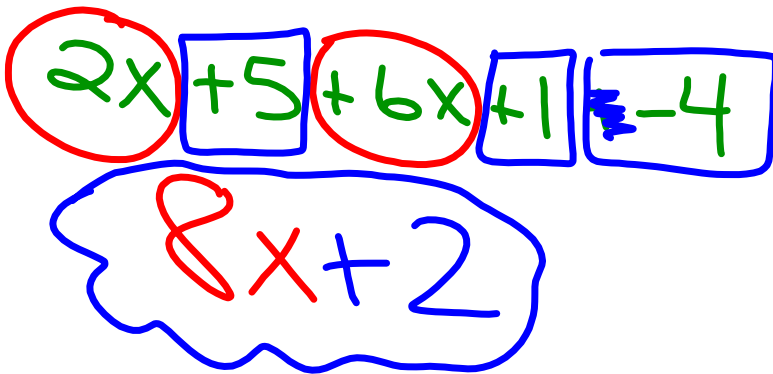
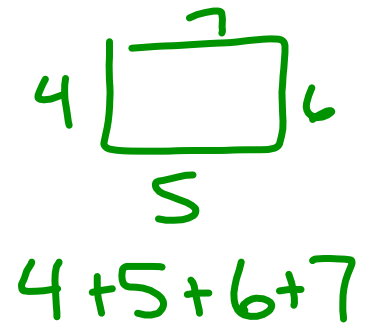
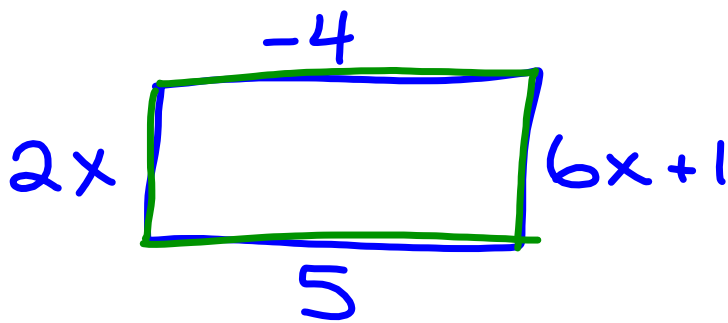


$$\begin{array}{r} + \\ - \\ \hline 7x \quad | \quad 5x \\ \hline + \\ - \\ \hline 1 \quad | \quad 2 \end{array}$$

$-5x + 1 + 7x - 2 - 9$

$$\begin{array}{r} + \\ - \\ \hline 1 \quad | \quad 2 \\ \hline + \\ - \\ \hline 9 \quad | \quad 9 \\ \hline 11 \end{array}$$

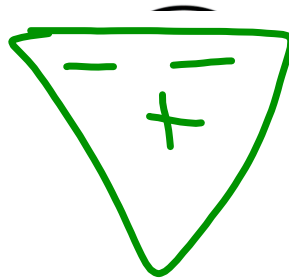
$2x - 10$



$$\begin{array}{l} 2(x+3) \\ \downarrow \quad \downarrow \\ 2(x) + 2(3) \\ \downarrow \quad \downarrow \\ 2 \cdot x \quad 2 \cdot 3 \\ \downarrow \quad \downarrow \\ 2x \quad 6 \\ \downarrow \\ 2x+6 \end{array}$$

### The Distributive Property

The number outside the parenthesis gets **multiplied** by both numbers or variables inside. You then simplify it possible.



$$\begin{array}{l} \text{3} \overbrace{(\text{x} - 4)} \\ \text{3}(\text{x} - 4) \\ \text{3}(\text{x}) - \text{3}(4) \\ \boxed{3x - 12} \end{array}$$

$$\begin{array}{l} \text{2} \overbrace{(2x + 3)} \\ \text{2}(2x + 3) \\ \text{2}(2x) + \text{2}(3) \\ \boxed{4x + 6} \end{array}$$

Try these!

1)  $5(-9 + 11)$

$5(-9) + 5(11)$

$-45 + 55$   
 $10$

$7(10 - 5)$

2)  $7(10 - 5)$

$7(10) - 7(5)$

$70 - 35$   
 $35$

3)  $(8 + 11) - 3$

$-3(8 + 11)$

$-3(8) + 3(11)$   
 $-24 - 33$   
 $-57$

4)  $(a + 4)b$

$$b(a + 4)$$

$$b(a) \quad b(4)$$

$$ba + 24$$

5)  $8(m + 3n)$

$$8(m) \quad 8(3n)$$

$$8m + 24n$$

6)  $-2(x - 8)$

$$-2(x) - 2(-8)$$

$$-2x + 16$$

$$7) \frac{1}{2}(w-4)$$

- - -  
+ - -

$$\frac{1}{2}(w) \quad \frac{1}{2}(\frac{-4}{1}) = \frac{-4}{2}$$

$$\frac{1}{2}w - 2$$

$$8) -3(2y-10)$$

$$-3(2y) - 3(-10)$$

$$\boxed{-6y + 30}$$



①

$$2x-3 \left[ \begin{array}{c} 1 \\ \hline 4x+1 \\ \hline -6 \end{array} \right]$$

②

$$\frac{1}{3}(x-4)$$