6.4 the distributive property
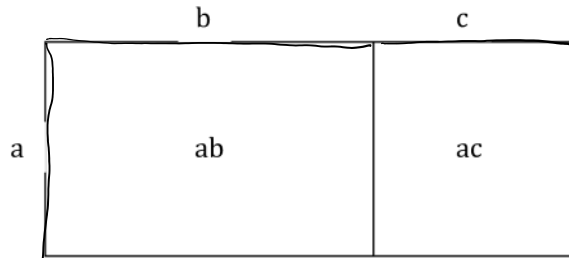
6.4 The Distributive Property Notes
Name_____ _____

The distributive property says that $a(b+c) = ab + ac$ $= ba + ca$

	b	c
a	ab	ac

To multiply $3(x+4)$:   To multiply $2(x-3)$:

Draw a rectangle diagram.   Use algebra tiles.

x	4
3x	12
3
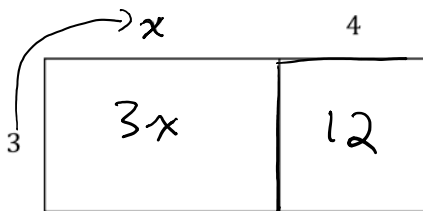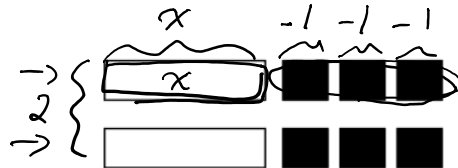
$3(x+4) = 3x + 12$ $2(x-3) = 2x - 6$

We can solve these questions using symbols only. It is known as the *rainbow method*.

Example:

$5(x+6)$ $-2(x-4)$
$= 5(x) + 5(6)$ $= -2(x) + (-2)(-4)$
$= 5x + 30$ $= -2x + 8$

Try These:

$4(-x-6)$

1. $3(x+9)$ 2. $\cancel{3(x+9)}$ 3. $-5(x-10)$

$= 3(x) + 3(9)$ $=$ $= -5(x) + (-5)(-10)$
$= 3x + 27$ $4(-x) + 4(-6)$ $= -5x + 50$
                      $= -4/x - 24$
                      $-4x - 24$

Assignment due Monday p. 342 #4a, 7bdfhj, 8bdfhj,

10, 12aceg, 14, 18a

Course planning sheets due