Part 1: Use Algebra tiles to model the distributive property

1) 3(x+5)	9) 3(x-4)
2) 2(x+7)	10) 2(x-5)
3) 5(x+2)	11) 5(x-3)
4) 4(x+3)	12) 4(x-2)
5) (x+4)3	13) 3(x-3)
6) (x+5)2	14) 5(x-4)
7) 2(x+6)	15) (x+6) 2
8) (x+2)4	16) (x-4)4

Example: 2(x+2)

there is an x+ 2 inside the parentheses

we represent the x with the algebra tile ▭

and positive whole number 2 as " ++ "

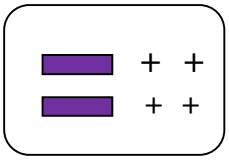
so "x+2" = ▭ + +

The "2" outside of the parentheses **2**(x + 2) tells us to multiply whatever is Inside the parentheses by 2.

▭ + +

▭ + +

Now, we draw a box around what we just multiplied so we can simplify it. We find the sum of the variables and the sum of the whole numbers:



We have 2 x and 4 + which we can write **2x + 4**

So, 2(x + 2) = 2x + 4

Now, work with your partner and complete # 1-16 using the next sheet. Be sure to use "+" for positive whole
Numbers and "-" for negative whole numbers

Name:_____ Seat #:____
Date:_____ Math Period:_____
Assignment: Distributive Property Lab

1. Use Algebra Tiles to solve each problem.
2. Draw the algebra tiles
3. Simplify by finding the sum of the variables and the whole numbers

1.	2.
3.	4.
5.	6.
7.	8.

9.	10.
11.	12.
13.	14.
15.	16.

Part 2:

DO NOT use Algebra Tiles. Show Your Work. NWNC

Example:

2(x **+**2)

Multiply the 2 that is outside of the parentheses by each term inside of the parentheses. Keep addition or substraction signs,

2 (x) **+ 2**(2)

Simplify:

2x + 4

17. 3(x+ 7)	18. 4(x -4)
19. 2(x+4)	19. 5(x-6)
20. (x-8)11	21. 8(x-5)
22. 6 (x+2)	23.(x + 7)4
24. 9(x-7)	25. 12(x+5)