

Math 7H - Unit 2a

Day 3 - Distributive Property


Lesson Objectives:

- I can simplify expressions using the distributive property.
- I can apply properties of operations as strategies to expand linear expressions with rational coefficients.

Remember that multiplication is all about groups.

2(4) Two groups of four 


2(x) Two groups of x 


2(x + 4) Two groups of x + 4 
 $2x + 8$

How could we describe in words $3(x + 1)$?

Model the expression on your desk and in your notes. 

How many x's are there? $3x$ How many units are there? $+3$

How could we describe in words $4(-2x - 3)$? 

Model the expression on your desk and in your notes. 
 How many x's are there? $-8x$ How many units are there? -12

Can you see a quicker way of finding out the total number in of x's and units in an expression WITHOUT sliding the pieces together and counting them?

The distributive property states that to multiply a sum or difference by a number, multiply each term inside the parentheses by the number outside the parentheses.

$$a(b + c) = ab + ac$$

$$a(b - c) = ab - ac$$

Simplify each expression WITHOUT using the Algebra Tiles.

A. $2(x + 5) = 2x + 10$

B. $4(3 - y) = 12 - 4y$
 or $-4y + 12$

C. $3(-4b + 2) = -12b + 6$

D. $5(-x - 5) = -5x - 25$
 $-5x + (-25)$

E. $-6(7 + p) = -42 - 6p$
 $-6p - 42$
 $-6p + -42$
 $-42 + -6p$

F. $-3(-9m - 2) = 27m + 6$

Homework

Distributive Property WKS

* Individual Think Time *



What to do if you get stuck...

- Reread the problem. Did you write it down correctly?
- Reread your notes. Is there a problem similar that we did together in class?
- Find a problem similar in your book. Try this one to see if it helps.
- Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...

