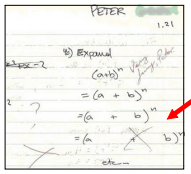
Math 7H - Unit 2a

Day 4 - Expand Linear Expressions

Lesson Objectives:

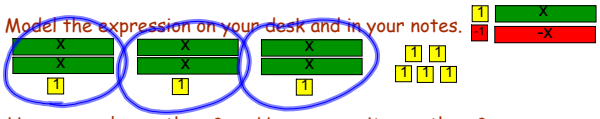
- I can apply properties of operations as strategies to expand linear expressions with rational coefficients.



This is NOT what we're talking about!

How could we describe in words 3(2x + 1) + 5?

Model the expression on your desk and in your notes.

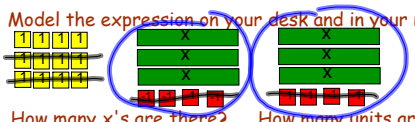


How many x's are there? 6x

How many units are there? +8

How could we describe in words 12 + 2(3x - 4)?

Model the expression on your desk and in your notes.



How many x's are there? 6x

How many units are there? +4

Remember, an algebraic expression is in **simplest form** when it has no like terms and no parentheses.

5(n - 8) + 4n

↓

5n - 40 + 4n

↓

9n - 40

Why do we use the distributive property BEFORE adding like terms?

3(q + 1) -1 ⟶ 3q + 3 - 1 ⟶ 3q + 2

Simplify each expression.

1. $2(g+4)+5(g-1)$

   $2g+8+5g-5$

   $7g+3$

2. $3(4z-5)-4(2z+6)$

   $12z-15+8z+24$

   $4z-39$

3. $4.2(-5y-3)$

   $-21y-12.6$

4. $7x+4\left(\frac{3}{4}x-\frac{1}{4}\right)$

   $7x+3x-1$

   $10x-1$

Homework

Expanding Linear Expressions WKS

* Individual Think Time *

What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. 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...