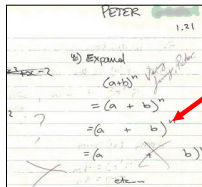


Math 7 - Unit 2a

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!

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

$$5(n-8) + 4n$$

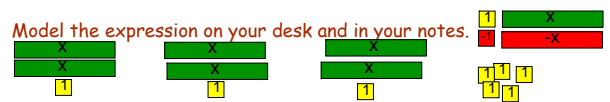
$$5n - 40 + 4n$$

$$9n - 40$$

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

$$3(q+1) - 1 \rightarrow 3q + 3 - 1 \rightarrow 3q + 2$$

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



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

Simplify each expression.

$$1. 2(g+4) + 5(g-1) = 7g + 3$$

$$3. 4.2(-5y-3) = -21y - 12.6$$

$$2. 3(4z-5) - 4(2z+6) = 4z - 39$$

$$4. 7x + 4\left(\frac{3}{4}x - \frac{1}{4}\right) = 10x - 1$$

$$\frac{4}{1}\left(\frac{3}{4}\right) = \frac{12}{4} = 3$$

$$\frac{4}{1}\left(-\frac{1}{4}\right) = -\frac{4}{4} = -1$$

Homework

Expanding Linear Expressions WKS

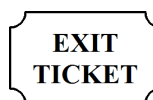
* Individual Think Time *



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...



Lining Up Dominoes

Begin with the piece marked "Start". Find the expression that is equivalent to the distributive property problem. Continue in this way until you reach "Stop".