Distributive Property Day 1

Distributive Property

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

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

Multiply each term in parenthesis by the term on the outside

Use the Distributive Property to Simplify

$3(2x + 1)$

$3(2x + 1) = 3(2x) + 3(1)$

Simplifies to _____

Simplify by using the distributive property

1. $8(9n - 2)$
2. $7(p - 3)$
3. $5(x + 10)$
4. $6(t + 4)$

Distributive Property with Integers

Remember our multiplying integer rules...

-multiplying two integers with same signs, our answer will always be _____

-multiplying two integers with different signs, our answer will always be _____

Example 1

-3(2x - 5)

Example 2

2(-3a - 4)

Example 3

6(-2y + 1)

Example 4

$-5(4 - 8n)$

What happens when there isn't a coefficient in front of the parenthesis and only a negative?

-(2x - 3)

Example 1

-(8 + 4v)

Example 2

-(-x + 6)

Try on your own!

1. -2(x - 3)

2. 3(-7y - 8)

3. -(4x - 6)

4. -7(1 + 2x)

5. -5(-b + 2)

6. -(-2x + 4)