Agenda

Homework:

- Distributive Property & Combining Like Terms Worksheet

- Materials:
  - Notebook

DO NOW

- Complete the following problems on your DESK:

  1. SIMPLIFY
     8x + 7 − 3x − 4

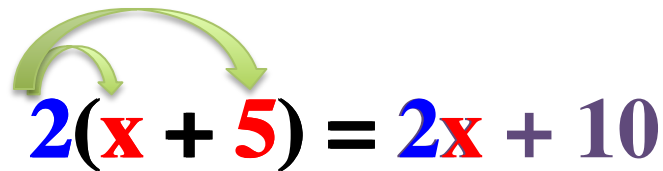 2. Approximate the square root of 67

Set Up Cornell Notes

- **Topic:** Distributive Property

- **EQ**: How do you simplify expressions by combining like terms?

- Update Table of Contents

What is the Distributive Property?

The process of "distributing" **(multiplying)** the **number** on the outside of the parentheses to each **TERM** on the inside.
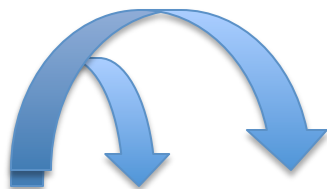
$$2(x + 5) = 2x + 10$$

What if there is ONLY a negative outside the parenthesis and NO number?
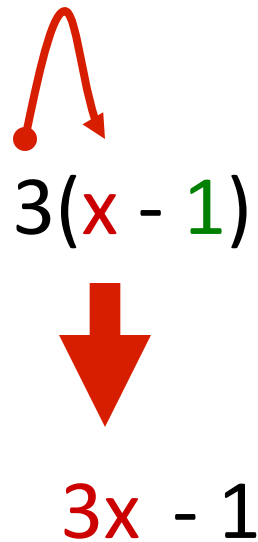
Use your math goggles!

The invisible number when multiplying is ALWAYS 1

So:

$$-1(x + 4) = -1(x) + -1(4) = -x + (-4)$$
$$= -x - 4$$

What is the most common error?

3(x - 1)

3x - 1

THIS IS INCORRECT!

Are we sure it works?

$$5(3 + 2)$$

$$15 + 10 = 25$$

Proof: $5(3+2) = 5(5) = 25$

Try these! ☺

3 (5x + 2)	-7(x − 4)
4(y − 3)	-(3x + 9)

How do you use both distributive property and combining like terms together?

- Example:

$$3x - 4(x - 5) + 2$$

Distribute FIRST, then combine like terms