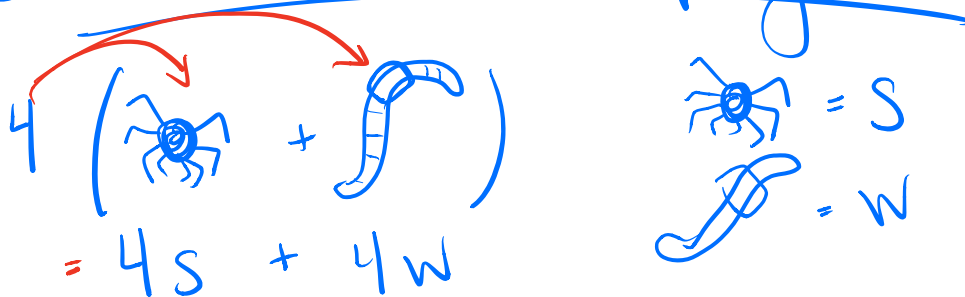


9

Distributive Property

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Theorem: $a(b+c) = \underline{ab} + \underline{ac}$

ex. $4(\underline{5} - \underline{2}) = 20 - 8 = 12$

PEMDAS $4(3) = 12$

ex. $4(5x - 2) = 20x - 8$

- Distribute a negative

$-(-4) = 4$

$-(5) = -5$

↳ Think of (-) negative symbol to represent

OPPOSITE

↳ What is the opposite of -4? (+4)

ex. $-(5 - 3x)$
 $-5 + 3x$

$-(-8y + 6y)$
 $8y - 6y = 2y$

Distributive Property Review II

Directions: Use the **Distributive Property** to simplify each **expression**.

1. $4(2x + 5x + 1)$

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

3. $-(2x + 5)$

4. $-(3x - 4x + 1)$

5. $-(-2x - 3x - 2)$

What's Happening with the Negative?

1. Look at problems 2-5, which all have a negative number outside of the parentheses. Look at the **expression** after you have distributed. What happened to the SIGNS of each term?

If the sign of a term was positive in the original problem and we distributed a negative, the **sign** is now _____.

If the sign of a term was negative in the original problem and we distributed a negative, the **sign** is now _____.