

Algebra Review!

- Warm-up
 - Take about 5-10 minutes to complete the coordinates worksheet from yesterday.
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Order of Operations

- **Objective**: Students will be able to simplify expressions using order of operations.

*Question: Do you know what the saying is for order of operations.

Example: Simplify the expression on your own

$$5 \cdot 6 + 8 \div 2$$

There are two different ways we could solve this problem. Which one is the correct way?

Way #1

~~$$5 \cdot 6 + 8 \div 2$$~~

~~$$30 + 8 \div 2$$~~

~~$$38 \div 2$$~~

~~$$19$$~~

Way #2

$$5 \cdot 6 + 8 \div 2$$

$$30 + 8 \div 2$$

$$30 + 4$$

$$34$$

Now try this

$$(3 \cdot 4 - 9) \cdot 7$$

$$(12 - 9) \cdot 7$$

$$(3) \cdot 7$$

$$21$$

PEMDAS

Parenthesis

More accurately read as

Exponent

Parenthesis

Multiplication

Exponent

Division

Multiplication

Division

Addition

Addition

Subtraction

Subtraction

Example

Simplify the expression using order of operations.

$$3^2 + 8 \div 4$$

$$9 + 8 \div 4$$

$$9 + 2$$

$$11$$

Example

Simplify the expression using order of operations

$$\frac{(5 + 7)}{(1 + 5)}$$

$$\frac{12}{6}$$

$$2$$

Working with Variables

Simplify the Expression using order of operations

$$\begin{aligned} & -(\underbrace{4x - 6x} + \underbrace{7 - 9}) \\ & \quad -(-2x - 2) \\ & \quad 2x + 2 \end{aligned}$$

More with Variables

Simplify the expression using order of operations

$$-(5 \cdot 2 + 3x) + (1 + 9 \div 3)$$

$$-(10 + 3x) + (1 + 3)$$

$$-10 - 3x + 4$$

$$-3x - 6$$



Worksheet: Order of Operations Practice

- Work with your group.
- Whatever you do not finish in class is homework.

