

Lesson 1-2 Order of Operations

SWBAT: Use the order of operations to simplify expressions and solve problems.

Vocab Words:

Expression –

Equation –

Simplify –

Solve –

Order of Operations:

Use the acronym P.E.M.D.A.S to help you remember the correct order of operations

Follow the order of operations in the steps as follows

1. P ()

2. E x^4

3. M •

D ÷

4. A +

S –

If you notice, Multiplication and Division are on the same step number and so is Addition and Subtraction. This means that you must do these operations from **left to right**.

Multiplication only comes before division if it is to the left of it on the problem. If you see the division first, you must do the division part of the problem before the multiplication part.

Same with Addition and Subtraction. If you see the subtraction part first, you have to do that before the addition part.

Ex: ① $35 + 5 \cdot 2 - 17$ ② $(6 + 18) \div 3 \cdot 2$

③ $10 - 3 + 4$ ④ $8 \div 4 \cdot 6 + (7 - 5)$

A group of 25 students and 3 adults goes to an art museum. Admission costs \$6 per student and \$9 per adult. There is a \$15 discount for groups of 20 or more. Find the total cost for the trip.

Challenge: Insert operation symbols between the numbers in the equation to make it a true statement.

$$14 \quad 7 \quad 2 \quad 3 = 7$$