· ············ · · · · · · · · · · · ·	Name	Per	
--	------	-----	--

Mrs. Doolan / Math 6

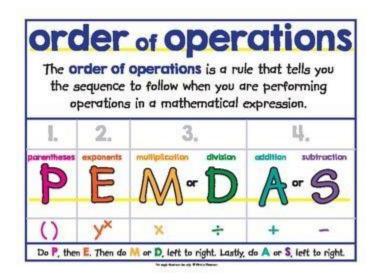
2-8 Order of Operations



Objective: You've learned to work with and solve arithmetic problems using just one operation.

Now you'll learn to simplify problems using several operations.

To solve multi-operational problems, use the <u>Order of Operations</u> (called PEMDAS, GEMDAS, or GEMS) and track from left to right:





NOTE: The P stands for all grouping symbols: parenthesis, brackets, and braces) { [()] }

To solve:

- 1) Underline the "most important" part of the problem, and solve just that part, writing it under the line
- 2) Rewrite the rest of the problem—working slowly helps you to not make mistakes!
- 3) Repeat until the problem is completed

Example #1:



$$3 \times 5 + 6^2 = b$$

$$3 \times 5 + \underline{6^2} = b$$
 1. Clear exponent: $6^2 = 36$

$$3 \times 5 + 36 = b$$
 2. Multiply: $3 \times 5 = 15$

$$15 + 36 = b$$
 3. Add: $15 + 36 = 51$

SOLVE: b = 51

YOU TRY:

1.
$$(21 + 4) \div 5 = m$$

2.
$$(15 - 3 \div 3 - 2) \div 2^2 = b$$

SUPER CHALLENGE QUESTION:

3.
$$(5 \times 6 + 7 \times 3) \div [12^2 - 10^2 - (3 \times 9)]$$