

ORDER OF OPERATIONS

The **order of operations** is the order in which a mathematical expression is to be simplified. Often called "PEMDAS," the order of operations is as follows:

Parentheses
Exponents
Multiplication
Division
Addition
Subtraction

Let's take a look at an example to see how this works.

$$(15 - 7) \div 4 \cdot 1$$
$$(8) \div 4 \cdot 1$$
$$8 \div 4 \cdot 1$$

The **p**arentheses indicate what operations must be completed first. After subtracting 7 from 15, continue following the order of operations. There are no **e**xponents, so move on to multiplication. **M**ultiply 4 by 1 to get 4. Then, **d**ivide 8 by 4 to get the correct answer of 2.

Here's one more example:

$$2^2 \cdot (3 - 1) \div 2 + 3 - 6$$

Parentheses: $2^2 \cdot 2 \div 2 + 3 - 6$

Exponents: $4 \cdot 2 \div 2 + 3 - 6$

Multiplication: $8 \div 2 + 3 - 6$

Division: $4 + 3 - 6$

Addition: $7 - 6$

Subtraction: 1

