

Order of operations

The order of operations is a set of rules which tell us how to solve a longer math expression/equation. If you follow the rules precisely, and if you can solve each section of the equation correctly, you will get the answer right. If you rush or skip a step 😞

The rules form an acronym (each letter stands for a word) and tell you what order to do the equation (hence the title). We shall use the acronym BEDMAS.

ORDER



B = Brackets. Do all steps (one by one) in the brackets first.

E = Exponents. Work out any exponents next.

D

M = } Multiplication
 OR
 Division

Whichever comes first.

Remember we do all equations from left to right.

A

S = } Addition
 OR
 Subtraction

Whichever comes first from left to right.

So, what do people do wrong in these questions?

1. They don't **follow the order**.
2. They don't do just **one step per line**.
3. They **think you have to do division before multiplication just because the acronym has the "D" first**. The important words are "whichever comes first".
4. They **have the same problem with addition and subtraction**.
5. They don't remember their multiplication tables or how to do exponents.

Think of order of operation questions as a challenge and puzzle your way through.

Underline the section you will be solving in the next line and write everything else exactly the same. If you make a mistake, try again. As with anything, practice makes us stronger.

If you do not have one or more of the operations in the equation that you are solving, just move to the next step in the order.

Example 1). $6 \times (12 + 5) + 3^2$
=

B
E
O
M
A
S

Example 2) $(6 \times 7 - 5^2) - 8$

=

S
A
M
D
E
B

Example 3) $(36 - 2^2) \div (11 - 7)$

=

S
A
M
D
E
B

* Sometimes BEDMAS is written as
 PEMDAS
 ↳ parentheses = brackets.