

Order of Operation

Please Excuse My Dear Aunt Sally

This is a funny saying to help you remember the way (or order) you do math problems that have more than one operation.

P – If a problem has **p**arentheses, do them first

E – If a problem has **e**xponents, do them second

M - If a problem has **m**ultiplication, do that next **OR**

D - If a problem has **d**ivision, do that next

A - If a problem has **a**ddition, do that next **OR**

S - If a problem has **s**ubtraction, do that next

Some students want to do ALL of the multiplication first then ALL of the division. Same way for addition and subtraction. This is wrong. Do multiplication **OR** division from left to right as you see it. Don't skip around. The same goes for addition and subtraction.

Example:

$$\begin{aligned} 10 \div 2 \times 3 \div 3 \times 5 &= X \\ 5 \times 3 \div 3 \times 5 &= X \\ 15 \div 3 \times 5 &= X \\ 5 \times 5 &= X \\ 25 &= X \end{aligned}$$



Example:

$$\begin{aligned} 10 \div 2 \times 3 \div 3 \times 5 &= X \\ 10 \div 6 \div 3 \times 5 &= X \\ 10 \div 6 \div 15 &= X \\ 1.667 \div 15 &= X \\ .111 &= X \end{aligned}$$

