

Order of Operations: PEMDAS

It's important to follow the **order of operations** when evaluating an expression. Otherwise, you might get the wrong answer! You can remember the order of operations using the acronym **PEMDAS**:

1. P arentheses, and other grouping symbols	<i>If your problem doesn't have one of these steps, move on to the next step!</i>
2. E xponents	
3. M ultiplication and D ivision, from left to right	
4. A ddition and S ubtraction, from left to right	

Let's try an example. Use the order of operations to evaluate $4 \times 6 + 2^2 - (4 + 3)$.

$$4 \times 6 + 2^2 - (4 + 3)$$

First, simplify what's inside the parentheses: $4 + 3 = 7$.

$$4 \times 6 + 2^2 - 7$$

Then, evaluate the exponent: $2^2 = 4$.

$$4 \times 6 + 4 - 7$$

Next, multiply: $4 \times 6 = 24$.

$$24 + 4 - 7$$

Then, add: $24 + 4 = 28$.

$$28 - 7 = 21$$

Finally, subtract $28 - 7$ to get the answer, 21.



Evaluate each expression using the order of operations.

$9 + 7 \times 8$	$46 + 19 - 4^2$	$16 \div 4 + 7$
$10^2 \times 2 + 40 \div 8$	$8 \times 12 \div (30 - 6)$	$64 - (8 + 12) \times 3$
$21 \div (3 + 4) \times 6$	$(9 - 5) \times 7 - 2 \times 8$	$48 \div 6 \times 2^2 - (3 + 5)$