Order of Operations
(BEDMAS)

When evaluating a mathematical expression, the operations must be done in a certain order. This order is sometimes called BEDMAS, after the first letters of the operations:

Brackets:	Evaluate what's inside the parentheses first. If there are brackets within brackets, do the ones that are farthest inside first. This step includes anything under a square root sign, the numerator or denominator of a fraction, or an expression in an exponent.
Exponents:	Calculate the results of any exponential expressions. Since square roots can also be exponents, they should also be evaluated in this step.
Division & **M**ultiplication:	Evaluate these from left to right. Multiplication and division have equal priority in order of operations.
Addition & **S**ubtraction:	Evaluate these last, from left to right. Addition and subtraction also have equal priority.

Let's try some examples:

1) $3 + 3 \times 4$
$= 3 + 12$ (We multiply before we add.)
$= 15$ (We add last.)

2) $(3 + 3) \times 4$
$= 6 \times 4$ (We do the brackets first. We add, and now because we have one positive number in brackets, we remove them.)
$= 24$ (We multiply, because it's the only step left.)

3) $2[2 + 2(3 - 6 \div 3 \times 4 - 9) + 6^2]$
$= 2[2 + 2(3 - \mathbf{8} - 9) + 6^2]$ (We start in the inside brackets. We multiply and divide, from left to right, first.)
$= 2[2 + 2(\mathbf{-14}) + 6^2]$ (We subtract. Because the brackets contain a negative number, we must keep them.)
$= 2[2 + 2(-14) + \mathbf{36}]$ (We evaluate exponents before anything else.)
$= 2[2 \mathbf{- 28} + 36]$ (The number in front of the brackets means multiplication. We do the square brackets next, and we multiply before we add or subtract.)
$= 2 \times \mathbf{9}$ (We add and subtract from left to right. We can replace the brackets with a "×" sign.)
$= 18$ (We multiply, because it's the only step left.)

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