



ORDER OF OPERATIONS

Numeric Data
Types

Numeric Type
Conversion

Arithmetic
Operators

Numeric
Functions

Python uses the standard PEMDAS **order of operations** to perform calculations

1. **P**arentheses
2. **E**xponentiation
3. **M**ultiplication & **D**ivision (including Floor Division & Modulo), from left to right
4. **A**ddition & **S**ubtraction, from left to right

Without Parentheses

$3 * 6 + 5 - 2 ** 3 - 1$ *Exponentiation first*

$3 * 6 + 5 - 8 - 1$ *Then multiplication*

$18 + 5 - 8 - 1$ *Finally, addition & subtraction*

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With Parentheses (to control execution)

$3 * ((6 + 5) - 2 ** (3 - 1))$ *Addition & subtraction in inner parentheses first*

$3 * (11 - 2 ** 2)$ *Then exponentiation in outer parenthesis*

$3 * (11 - 4)$ *Then subtraction in outer parenthesis*

$3 * 7$ *Finally, multiplication*

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