



Ruby MasterClass  
**Gearing**  
Up

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- PEMDAS

## Parenthesis, Exponents, Multiplication, Division, Addition, Subtraction

$$10 - 1 * 3 + 5 / 3 ** 5 - (4 + 5)$$

$$10 - 1 * 3 + 5 / \underline{3 ** 5} - 9$$

243

$$10 - \underline{1 * 3} + 5 / 243 - 9$$

3

$$10 - 3 + 5 / \underline{243} * - 9$$

0

$$10 - 3 + \underline{0} - 9$$

3

$$\underline{10 - 3} - 9$$

7

$$7 - 9$$

outputs: -2

\* Integer Division, returns an integer value. the correct result of  $(5 / 243)$  would be "0.0205761316872428" using decimals in one or both of the operands.

## ● Ruby Operators (Highest to lowest precedence)

Method	Operator	Description
Yes	[ ], [ ]=	Element reference, element set
Yes	**	Exponentiation (raise to the power)
Yes	!, ~, +, -	Not, complement, unary plus and minus (method names for the last two are +@ and -@)
Yes	*, /, %	Multiply, divide, and modulo
Yes	+, -	Addition and subtraction
Yes	>>, <<	Right and left bitwise shift
Yes	&	Bitwise 'AND'
Yes	^,	Bitwise exclusive 'OR' and regular 'OR'
Yes	<=, <, >, >=	Comparison operators
Yes	<=>, ==, ===, !=, =~, !~	Equality and pattern match operators (!= and !~ may not be defined as methods)
	&&	Logical 'AND'
		Logical 'AND'
	..., ...	Range (inclusive and exclusive)
	? :	Ternary if-then-else
	=, %=, {, /=, -=, +=,  =, &=, >>=, <<=, *=, &&=,   =, **=	Assignment
	defined?	Check if specified symbol defined
	not	Logical negation
	or, and	Logical composition
	if, unless, while, until	Expression modifiers
	begin/end	Block expression