



Outline

- 1. Introduction
- 2. Arithmetic functions
- 3. Order of operations
- 4. Difference between integers and floats in Ruby



1. Introduction

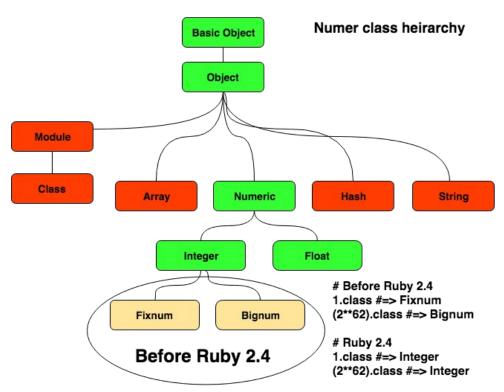
- In Ruby, numbers without decimal points are called integers
- Numbers with decimal points are usually called floating-point numbers (Float)

Example:

```
Integer 1, 3, 5, 100_000_000
Float 3.5, 10.0
```



1. Introduction



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2. Arithmetic functions

```
2.4.0 :051 > 5 + 5 # addition

10

2.4.0 :052 > 5 - 5 # subtraction

0

2.4.0 :053 > 5 * 5 # multiplication

25

2.4.0 :054 > 5 / 5 # division

1

2.4.0 :055 > 5 ** 5 # power (exponent)

3125
```



3. Order of operations

- Parenthesis, Exponents, Multiplication, Division, Addition, Subtraction

What is result?

```
2.4.0:001 > p 5 + 15 * 20 - 2 / 6**3 - (3+1) # ???
```



4. Diff between integers and floats

```
2.4.0 :001 > 1.class
Integer < Numeric
2.4.0 :002 > 1.0.class
Float < Numeric</pre>
```

=> What is result?

```
puts 9/2
puts 9.0/2.0
puts 5/2.0
puts 2**4
puts 0.4 - 0.3 == 0.1
```



References

http://ruby-doc.org/core-2.4.0/Numeric.html



Thank you!