

Operator Cheat Sheet

Numeric Operators

| Operator | Operand 1 type | Operand 2 type | Return type | Examples |
|------------------------------------------------------------------------------------|----------------|----------------|-------------|---------------------------------------------------------------------------------------------|
| <code>+</code> (addition) | int/float | int/float | int/float | <code>4 + 7</code> (11), <code>2 + 3.5</code> (5.5) |
| <code>-</code> (subtraction) | int/float | int/float | int/float | <code>12 - 15</code> (-3), <code>4 - 8.0</code> (-4.0) |
| <code>*</code> (multiplication) | int/float | int/float | int/float | <code>5 * 8</code> (40), <code>3.5 * 2</code> (7.0) |
| <code>/</code> (integer division) | int | int | int | <code>12 / 4</code> (3), <code>8 / 9</code> (0) |
| <code>/</code> (division) <small>(at least one operand must be a float)</small> | int/float | int/float | float | <code>1 / 2.0</code> (0.5), <code>2.0 / 8</code> (0.25) |
| <code>%</code> (modulo) | int | int | int | <code>100 % 9</code> (1), <code>2 % 5</code> (2) |
| <code>**</code> (exponentiation) | int/float | int/float | int/float | <code>2 ** 3</code> (8), <code>4 ** 0.5</code> (2) |

Comparison Operators

| Operator | Operand 1 type | Operand 2 type | Return type | Examples |
|---------------------------------------|----------------|----------------|-------------|-------------------------------------------------------------------------------------------------------|
| <code><</code> (less than) | int/float | int/float | boolean | <code>4 < 5</code> (True), <code>-5.2 < -7.5</code> (False) |
| <code>></code> (greater than) | int/float | int/float | boolean | <code>4 > 5</code> (False), <code>-5.2 > -7.5</code> (True) |
| <code><=</code> (less or equal) | int/float | int/float | boolean | <code>12 <= 12</code> (True), <code>18 <= 0</code> (False) |
| <code>>=</code> (greater or equal) | int/float | int/float | boolean | <code>0 >= 0</code> (True), <code>18 >= 0</code> (True) |

Equality Operators

| Operator | Operand 1 type | Operand 2 type | Return type | Examples |
|-----------------------------|----------------|----------------|-------------|-------------------------------------------------------------------------------------------------------|
| <code>==</code> (equal) | anything | anything | boolean | <code>5 == 5</code> (True), <code>"sdf" == "s df"</code> (False) |
| <code>!=</code> (not equal) | anything | anything | boolean | <code>5 != "5"</code> (True), <code>"sdf" != "sdf"</code> (False) |

Logical Operators

| Operator | Operand 1 type | Operand 2 type | Return type | Examples |
|------------------|----------------|----------------|-------------|----------------------------------------|
| <code>and</code> | boolean | boolean | boolean | True and True (true) |
| <code>or</code> | boolean | boolean | boolean | True or False (true) |
| <code>not</code> | boolean | | boolean | not True (false) |