

6 Operators

Full list of JavaScript operators <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators>

Operators are reserved-words that perform action on values and variables.

Arithmetic

.. + .. Add
.. - .. Subtract
.. * .. Multiply
.. / .. Divide
.. % .. Remainder
.. ** .. Exponential

Assignment

.. = .. Assign value
.. += .. Add then assign
.. -= .. Subtract then assign
.. *= .. Multiply then assign

Logical

.. || .. Or
.. && .. And

Equality

.. === .. Equality
.. == .. Equality with coercion

Conversion

+ .. Convert to number
- .. Convert to number then negate it
! .. Convert to boolean then inverse it

Relational / Comparison

.. >= .. Greater than or equal to
.. <= .. Less than or equal to
.. != .. Not equal after coercion
.. !== .. Not equal

Increment / Decrement

..++ Postfix increment
..-- Postfix decrement

++.. Prefix increment
--.. Prefix decrement

Others

typeof ..
.. instanceof ..
(..)
...spread-operator
..
..[..]
new ..
delete ..
(.. ? .. : ..)

Operator Precedence

Given multiple operators are used in an expression, the "Operator Precedence" determines which operator will be executed first. The higher the precedence, the earlier it will get executed.

Operator Associativity

Given multiple operators have the same precedence, "Associativity" determines in which direction the code will be parsed.

See the **Operator Precedence and Associativity table** here:

<http://bit.ly/operatortable>

7 Coercion

When trying to compare different "types", the JavaScript engine attempts to convert one type into another so it can compare the two values.

Type coercion priority order:

1. String
2. Number
3. Boolean

```
2 + "7"; // "27"
true - 5 // -4
```

Coercion in action

Does this make sense?