



# Operators

Arithmetic Operators

Comparison Operators

Logical Operators



# Arithmetic Operators

Arithmetic operators are used to perform arithmetic between variables and/or values.

# Examples: let $y = 5$ ;



Operator	Description	Example	Result in y	Result in x
+	Addition	$x = y + 2$	$y = 5$	$x = 7$
-	Subtraction	$x = y - 2$	$y = 5$	$x = 3$
*	Multiplication	$x = y * 2$	$y = 5$	$x = 10$
/	Division	$x = y / 2$	$y = 5$	$x = 2.5$
%	Modulus	$x = y \% 2$	$y = 5$	$x = 1$
++	Increment	$x = ++y$	$y = 6$	$x = 6$
--	Decrement	$x = --y$	$y = 4$	$x = 4$

# Assignment Operators: Examples

let x = 10;

let y = 5;

Operator	Example	Same as	Result in x
+=	x += y	x = x + y	x = 15
-=	x -= y	x = x - y	x = 5



# Type Coercion: Introduction

Type coercion is the process of converting a value from one type to another (such as string to number, object to boolean, and so on). Any type, be it primitive or an object, is a valid subject for type coercion.

# Implicit & Explicit Coersion



We can explicitly convert between types by writing the appropriate code.

E.g. `Number(value)`.

Since JavaScript is a weakly-typed language, values can also be converted between different types automatically, and it is called implicit type coercion.

# Three Types of Coersion



There are only three types of conversion in JavaScript:

to string

to boolean

to number

\*Conversion logic for primitives and objects works differently, but both primitives and objects can only be converted in these three ways.