

Functions

Classic Functions

```
function inc(x, by = 1) {
  return x + by
}
const inc = function(x, by = 1) {
  return x + by
}
```

Arrow Functions

```
const inc = (x, by = 1) => {
  return x + by
}
const inc = (x, by = 1) => x + by
const incOne = x => x + 1
```

Object Literals & Constructors

Literal	typeof	Constructor
1	'number'	Number()
3.14	'number'	Number()
'some text'	'string'	String()
[]	'object'	Array()
{}	'object'	Object()
true	'boolean'	Boolean()
function f() {}	'function'	Function()

Array Methods

Task	Method	Modifies
Add to a stack (LIFO)	push	in-place
Get from stack (LIFO)	pop	in-place
Add to queue (FIFO)	unshift	in-place
Get from queue (FIFO)	shift	in-place
Add multiple elements at the end	concat	copy
Get subarray	slice	copy
Add or remove elements at position	splice	in-place
Cut and replace within array	copyWithin	in-place
Fill an array	fill	in-place
Reverse an array	reverse	in-place
Sort an array	sort	in-place

Math

A built-in object with properties and methods for math operations.

Properties

Math	Value
.PI	π
.E	Euler's constant
.LN2	Natural logarithm of 2
.LN10	Natural Logarithm of 10
.LOG2E	Base 2 Logarithm of e

Methods

Math	Value
.abs(x)	Absolute value
.cbrt(x)	Cube root
.ceil(x), .floor(x)	Integer ceiling, floor
.exp(x)	e^x
.log(x), .log1p(x), .log10(x), .log2(x)	$\ln()$, $\ln(1+x)$, $\log_{10}(x)$, $\log_2(x)$
.max(...x), .min(...x)	Max and min value
.pow(x, y)	x^y
.random()	Unif. random # in [0, 1]
.round(x)	Round to nearest integer
.sign(x)	Sign of x
.trunc(x)	Integer part of x
.sin(x), .sinh(x), .cos(x), .cosh(x), .tan(x), .tanh(x)	Trigonometric functions
.asin(x), .asinh(x), .acos(x), .acosh(x), .atan(x), .atanh(x)	Inverse trigonometric functions

DOM

Find DOM Elements

```
<button id="submit" class="btn">
  </button>
```

document	Example input
.getElementById()	'submit'
.getElementsByClassName()	'btn'
.getElementsByTagName()	'button'
.querySelector()	'button'
.querySelectorAll()	'button'

Box Title 1

Sub Title 1

Ipsum suspendisse blandit conubia sagittis montes in arcu condimentum cubilia cum ornare. Facilisi magna porttitor est ut vitae porta.

$e = mc^2$

Box Title 1

Sub Title 1

Elit sociosqu laoreet bibendum inceptos elementum integer primis nulla curae aenean nulla imperdiet? Risus primis facilisi integer magna lobortis nec sagittis accumsan nullam cras fusce dapibus? Eros vestibulum class libero at mauris potenti a ultrices curabitur nullam molestie varius molestie!

Box Title 1

Sub Title 1

```
Array.prototype.from();
document.getElementById('test');
```