

# Math

## Property Summary

Number	<a href="#">E</a> Euler's constant and the base of natural logarithms.
Number	<a href="#">LN10</a> Natural logarithm of 10.
Number	<a href="#">LN2</a> Natural logarithm of 2.
Number	<a href="#">LOG10E</a> Base 10 logarithm of E.
Number	<a href="#">LOG2E</a> Base 2 logarithm of E.
Number	<a href="#">PI</a> Ratio of the circumference of a circle to its diameter.
Number	<a href="#">SQRT1_2</a> Square root of 1/2.
Number	<a href="#">SQRT2</a> Square root of 2.

## Method Summary

Number	<a href="#">abs(x)</a> Returns the absolute value of a number.
Number	<a href="#">acos(x)</a> Returns the arccosine (in radians) of a number.
Number	<a href="#">asin(x)</a> Returns the arcsine (in radians) of a number.
Number	<a href="#">atan(x)</a> Returns the arctangent (in radians) of a number.
Number	<a href="#">atan2(y, x)</a> Returns the arctangent of the quotient of its arguments.
Number	<a href="#">ceil(x)</a> Returns the smallest integer greater than or equal to a number.
Number	<a href="#">cos(x)</a> Returns the cosine of a number.
Number	<a href="#">exp(x)</a> Returns Euler number, where number is the argument, and E is Euler's constant, the base of the natural logarithms.
Number	<a href="#">floor(x)</a> Returns the largest integer less than or equal to a number.
Number	<a href="#">log(x)</a> Returns the natural logarithm (base E) of a number.
Number	<a href="#">max(value)</a> Returns the greater of two (or more) numbers.
Number	<a href="#">min(value)</a> Returns the lesser of two (or more) numbers.
Number	<a href="#">pow(base, exponent)</a> Returns base to the exponent power, that is, base exponent.
void	<a href="#">random()</a> Returns a pseudo-random number between 0 and 1.
void	<a href="#">round(x)</a> Returns the value of a number rounded to the nearest integer.
void	<a href="#">sin(x)</a> Returns the sine of a number.
void	<a href="#">sqrt(x)</a> Returns the square root of a number.
void	<a href="#">tan(x)</a> Returns the tangent of a number.

## Property Details

**E**

Euler's constant and the base of natural logarithms. Approximately 2.718.

**Returns**

[Number](#)

**Sample**

```
Math.E
```

**LN10**

Natural logarithm of 10. Approximately 2.302.

**Returns**

[Number](#)

**Sample**

```
Math.LN10
```

**LN2**

Natural logarithm of 2. Approximately 0.693.

**Returns**

[Number](#)

**Sample**

```
Math.LN2
```

**LOG10E**

Base 10 logarithm of E. Approximately 0.434.

**Returns**

[Number](#)

**Sample**

```
Math.LOG10E
```

**LOG2E**

Base 2 logarithm of E. Approximately 1.442.

**Returns**

[Number](#)

**Sample**

```
Math.LOG2E
```

**PI**

Ratio of the circumference of a circle to its diameter. Approximately 3.14159.

**Returns**

[Number](#)

**Sample**

```
Math.PI
```

**SQRT1\_2**

Square root of 1/2. Equivalently, 1 over the square root of 2, approximately 0.707.

## Returns

Number

## Sample

```
Math.SQRT1_2
```

## SQRT2

Square root of 2. Approximately 1.414.

## Returns

Number

## Sample

```
Math.SQRT2
```

## Method Details

### abs

Number **abs** (x)

Returns the absolute value of a number.

#### Parameters

{Number} x

#### Returns

Number

#### Sample

```
Math.abs(number)
```

### acos

Number **acos** (x)

Returns the arccosine (in radians) of a number.

#### Parameters

{Number} x

#### Returns

Number

#### Sample

```
Math.acos(number)
```

### asin

Number **asin** (x)

Returns the arcsine (in radians) of a number.

#### Parameters

{Number} x

#### Returns

Number

## Sample

```
Math.asin(number)
```

## atan

**Number** `atan` (x)

Returns the arctangent (in radians) of a number.

### Parameters

{**Number**} x

### Returns

**Number**

## Sample

```
Math.atan(number)
```

## atan2

**Number** `atan2` (y, x)

Returns the arctangent of the quotient of its arguments.

### Parameters

{**Number**} y

{**Number**} x

### Returns

**Number**

## Sample

```
Math.atan2(number, number)
```

## ceil

**Number** `ceil` (x)

Returns the smallest integer greater than or equal to a number.

### Parameters

{**Number**} x

### Returns

**Number**

## Sample

```
Math.ceil(number)
```

## cos

**Number** `cos` (x)

Returns the cosine of a number.

### Parameters

{**Number**} x

### Returns

**Number**

## Sample

```
Math.cos(number)
```

## exp

**Number** `exp` (x)

Returns Enumber, where number is the argument, and E is Euler's constant, the base of the natural logarithms.

**Parameters**

{Number} x

**Returns**

Number

**Sample**

```
Math.exp(number)
```

**floor**

Number floor (x)

Returns the largest integer less than or equal to a number.

**Parameters**

{Number} x

**Returns**

Number

**Sample**

```
Math.floor(number)
```

**log**

Number log (x)

Returns the natural logarithm (base E) of a number.

**Parameters**

{Number} x

**Returns**

Number

**Sample**

```
Math.log(number)
```

**max**

Number max (value)

Returns the greater of two (or more) numbers.

**Parameters**

{Number...} value

**Returns**

Number

**Sample**

```
Math.max(number, number, number)
```

**min**

Number min (value)

Returns the lesser of two (or more) numbers.

**Parameters**

{Number...} value

**Returns**

Number

## Sample

```
Math.min(number, number, number)
```

## pow

**Number** **pow** (base, exponent)

Returns base to the exponent power, that is, base exponent.

### Parameters

{**Number**} base

{**Number**} exponent

### Returns

**Number**

## Sample

```
Math.pow(number, number)
```

## random

void **random** ()

Returns a pseudo-random number between 0 and 1.

### Returns

void

## Sample

```
Math.random()
```

## round

void **round** (x)

Returns the value of a number rounded to the nearest integer.

### Parameters

{**Number**} x

### Returns

void

## Sample

```
Math.round(number)
```

## sin

void **sin** (x)

Returns the sine of a number.

### Parameters

{**Number**} x

### Returns

void

## Sample

```
Math.sin(number)
```

## sqrt

void **sqrt** (x)

Returns the square root of a number.

**Parameters**

{Number} x

**Returns**

void

**Sample**

```
Math.sqrt(number)
```

**tan**

void **tan** (x)

Returns the tangent of a number.

**Parameters**

{Number} x

**Returns**

void

**Sample**

```
Math.tan(number)
```