

Math

Property Summary

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

Method Summary

Number	#abs(x)	Returns the absolute value of a number.
Number	#acos(x)	Returns the arccosine (in radians) of a number.
Number	#asin(x)	Returns the arcsine (in radians) of a number.
Number	#atan(x)	Returns the arctangent (in radians) of a number.
Number	#atan2(y, x)	Returns the arctangent of the quotient of its arguments.
Number	#ceil(x)	Returns the smallest integer greater than or equal to a number.
Number	#cos(x)	Returns the cosine of a number.
Number	#exp(x)	Returns E*number, where number is the argument, and E is Euler's constant, the base of the natural logarithms.
Number	#floor(x)	Returns the largest integer less than or equal to a number.
Number	#log(x)	Returns the natural logarithm (base E) of a number.
Number	#max(value1, value2, [valueN])	Returns the greater of two (or more) numbers.
Number	#min(value1, value2, [valueN])	Returns the lesser of two (or more) numbers.
Number	#pow(base, exponent)	Returns base to the exponent power, that is, base exponent.
void	#random()	Returns a pseudo-random number between 0 and 1.
void	#round(x)	Returns the value of a number rounded to the nearest integer.
void	#sin(x)	Returns the sine of a number.
void	#sqrt(x)	Returns the square root of a number.
void	#tan(x)	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 E^{number}, 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**(value1, value2, [valueN])

Returns the greater of two (or more) numbers.

Parameters

{**Number**} value1

{**Number**} value2

{**Number**} [valueN]

Returns

Number

Sample

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

min

Number **min**(value1, value2, [valueN])

Returns the lesser of two (or more) numbers.

Parameters

{**Number**} value1

{**Number**} value2

{**Number**} [valueN]

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)
```