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 Enumber, 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(value) Returns the greater of two (or more) numbers.
Number	min(value) 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 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)
```