

Math

 Apr 07, 2024 13:26

Supported Clients

SmartClient WebClient NGClient MobileClient

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.

Methods 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

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.E
```

LN10
Natural logarithm of 10. Approximately 2.302.

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.LN10
```

LN2

Natural logarithm of 2. Approximately 0.693.

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.LN2
```

LOG10E

Base 10 logarithm of E. Approximately 0.434.

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.LOG10E
```

LOG2E

Base 2 logarithm of E. Approximately 1.442.

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.LOG2E
```

PI

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

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.PI
```

SQRT1_2

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

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.SQRT1_2
```

SQRT2

Square root of 2. Approximately 1.414.

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

```
Math.SQRT2
```

Methods Details

abs(x)

Returns the absolute value of a number.

Parameters

[Number](#) x;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

acos(x)

Returns the arccosine (in radians) of a number.

Parameters

[Number](#) x;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

asin(x)

Returns the arcsine (in radians) of a number.

Parameters

[Number](#) x;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

atan(x)

Returns the arctangent (in radians) of a number.

Parameters

Number x;

Returns

Number

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

atan2(y, x)

Returns the arctangent of the quotient of its arguments.

Parameters

Number y;

Number x;

Returns

Number

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

ceil(x)

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

Parameters

Number x;

Returns

Number

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

cos(x)

Returns the cosine of a number.

Parameters

Number x;

Returns

Number

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

```
Math.cos(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](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

floor(x)

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

Parameters

[Number](#) x ;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

log(x)

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

Parameters

[Number](#) x ;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

max(value)

Returns the greater of two (or more) numbers.

Parameters

[Array](#) value ;

Returns

[Number](#)

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

min(value)

Returns the lesser of two (or more) numbers.

Parameters

[Array](#) value ;

Returns

[Number](#)

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

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

pow(base, exponent)

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

Parameters

Number base ;
Number exponent ;

Returns

Number

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

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

random()

Returns a pseudo-random number between 0 and 1.

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

```
Math.random()
```

round(x)

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

Parameters

Number x;

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

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

sin(x)

Returns the sine of a number.

Parameters

Number x;

Supported Clients

SmartClient,WebClient,NGClient,MobileClient

Sample

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

sqrt(x)

Returns the square root of a number.

Parameters

Number x;

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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

tan(x)

Returns the tangent of a number.

Parameters

Number x;

Supported Clients

SmartClient, WebClient, NGClient, MobileClient

Sample

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