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//JavaScript Math Object
// The JavaScript Math object allows you to perform mathematical
tasks on numbers.
//Example:
// console.log(Math.PI);

// The Math Object
// Unlike other objects, the Math object has no constructor.

// The Math object is static.

// All methods and properties can be used without creating a Math
object first.

// Math Properties (Constants)
// The syntax for any Math property is : Math.property.

// JavaScript provides 8 mathematical constants that can be accessed
as Math properties:
// Example
// Math.E        // returns Euler's number
// Math.PI       // returns PI
// Math.SQRT2    // returns the square root of 2
// Math.SQRT1_2  // returns the square root of 1/2
// Math.LN2      // returns the natural logarithm of 2
// Math.LN10     // returns the natural logarithm of 10
// Math.LOG2E    // returns base 2 logarithm of E
// Math.LOG10E   // returns base 10 logarithm of E

// Math Methods
// The syntax for Math any methods is : Math.method(number)
// Number to Integer
// There are 4 common methods to round a number to an integer:

// Math.round(x)    Returns x rounded to its nearest integer
// Math.ceil(x) Returns x rounded up to its nearest integer
// Math.floor(x)    Returns x rounded down to its nearest integer
// Math.trunc(x)    Returns the integer part of x (new in ES6)

// Math.round()
// Math.round(x) returns the nearest integer:
//Example
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// console.log(Math.round(4.1));
// console.log(Math.round(4.6));

// Math.ceil()
// Math.ceil(x) returns the value of x rounded up to its nearest
integer:

// Example
// console.log(Math.ceil(4.9));
// console.log(Math.ceil(4.7));
// console.log(Math.ceil(4.4));
// console.log(Math.ceil(4.2)); //--- up : 5
// console.log(Math.ceil(-4.2));

// Math.floor()
// Math.floor(x) returns the value of x rounded down to its nearest
integer:
//Example
// console.log(Math.floor(4.9)); //down: 4
// console.log(Math.floor(4.7));
// console.log(Math.floor(4.4));
// console.log(Math.floor(4.2));
// console.log(Math.floor(-4.2)); //-5

// Math.trunc()
// Math.trunc(x) returns the integer part of x:

// console.log(Math.trunc(4.9));
// console.log(Math.trunc(4.7));
// console.log(Math.trunc(4.4));
// console.log(Math.trunc(4.2));
// console.log(Math.trunc(-4.2));
// console.log(Math.trunc(-4.9));

// JavaScript Random
// Math.random()
// Math.random() returns a random number between 0 (inclusive),  and
1 (exclusive):
// Example
// Returns a random number:
// console.log(Math.random());
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//Example
// const x = Math.random();
// console.log(x);

// Example
// const x = Math.random()*10;
// console.log(x);

// Math.random() always returns a number lower than 1.

// JavaScript Random Integers
// Math.random() used with Math.floor() can be used to return random
integers.

// There is no such thing as JavaScript integers.

// We are talking about numbers with no decimals here.

// Example
// Returns a random integer from 0 to 9:
// console.log(Math.floor(Math.random() * 10));

// const x = Math.floor(Math.random() * 101);
// console.log(x);


// JavaScript Date Objects:

let date = new Date();
console.log(date);




// JavaScript Date Objects:

let date1 = new Date();
console.log(date1);

let date2 = new Date();
console.log(date2.getTime());
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let date3 = new Date();
console.log(date3.getMonth());

let date4 = new Date();
console.log(date4.getFullYear());

let date5 = new Date();
console.log(date5.getHours());

let date6 = new Date();
console.log(date6.getMinutes());

let date7 = new Date(2020,11,1,5);
console.log(date7);
```