**Date Object**

*Last updated: July 30th, 2004*

There are fours ways of instantiating a date object:

new Date()  
new Date(milliseconds)  
new Date(dateString)  
new Date(year, month, day, hours, minutes, seconds, milliseconds) //most parameters here are optional. Not specifying causes 0 to be passed in.

Here are a few examples of instantiating a date:

today = new Date()  
birthday = new Date("March 11, 1985 09:25:00")  
birthday = new Date(85,2,11)  
birthday = new Date(85,2,11,9,25,0)

**Note:** [**Be sure to check out our Date examples.**](http://www.javascriptkit.com/jsref/date.shtml#e1)

**http://www.javascriptkit.com/jsref/bullet.gifRelated Tutorials**

* [Creating a live JavaScript clock](http://www.javascriptkit.com/javatutors/time1.shtml)
* [Calculating the difference between two dates](http://www.javascriptkit.com/javatutors/datedifference.shtml)
* [Y2K and your date scripts](http://www.javascriptkit.com/javatutors/y2kdate.shtml)

Top of Form

**Filter by Property/ Method: Loading...**

Bottom of Form

**http://www.javascriptkit.com/jsref/bullet.gifProperties**

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| **Properties** | **Description** |
| prototype | Use this property to attach additional properties and/or methods that get reflected in all instances of the Date object. |

**http://www.javascriptkit.com/jsref/bullet.gifMethods**

**Note: "[]" surrounding a parameter below means the parameter is optional.**

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| **Methods** | **Description** |
| getFullYear() | Returns year in full 4 digit format (ie: 2004). |
| getYear() | Returns the year, in 4 digit format or otherwise depending on browser. Deprecated in favor of getFullYear(). |
| getMonth() | Returns the month. (Range is 0-11)! |
| getDate() | Returns the day of the month (Range is 1-31) |
| getDay() | Returns the day of the week (Range is 0-6). 0=Sunday, 1=Monday, etc. |
| getHours() | Returns the hour (Range is 0-23). |
| getMinutes() | Returns the minutes. (Range is 0-59). |
| getSeconds() | Returns the seconds. (Range is 0-59). |
| getMilliseconds() | Returns the milliseconds. (Range is 0-999). |
| getTime() | Returns the millisecond representation of the current Date object. In the words, the number of milliseconds between 1/1/1970 (GMT) and the current Date object. |
| getTimezoneOffset() | Returns the offset (time difference) between Greenwich Mean Time (GMT) and local time of Date object, in minutes. |
| getUTCFullYear() | Returns the full 4 digit year in Universal time. |
| getUTCMonth() | Returns the month in Universal time. |
| getUTCDate() | Returns the day of the month in Universal time. |
| getUTCDay() | Returns the day of the week in Universal time. |
| getUTCHours() | Returns the hour in Universal time. |
| getUTCMinutes() | Returns the minutes in Universal time. |
| getUTCSeconds() | Returns the seconds in Universal time. |
| getUTCMilliseconds() | Returns the milliseconds in Universal time. |
|  |  |
| setFullYear(year, [month], [day]) | Sets the year of the Date object. (year: 4 digit year). |
| setYear(year) | Sets the year of the Date object. "year" can be two digits (1900 is automatically added to it), or 4 digits. Deprecated over setFullYear() above. |
| setMonth(month, [day]) | Sets the month of the Date object. (month: 0-11) |
| setDate(day\_of\_month) | Sets the day of the month of the Date object. (day\_of\_month: 1-31). |
| setHours(hours, [minutes], [seconds], [millisec]) | Sets the hour of the Date object. (hours: 0-23). |
| setMinutes(minutes, [seconds], [millisec]) | Sets the minutes of the Date object. (minutes: 0-59). |
| setSeconds(seconds, [millisec]) | Sets the seconds of the Date object. (seconds: 0-59). |
| setMilliseconds(milli) | Sets the milliseconds field of the Date object. (milli: 0-999) |
| setTime(milli) | Sets the value of the Date object in terms of milliseconds elapsed since 1/1/1970 GMT. |
| setUTCFullYear(year, [month], [day]) | Sets the year of the Date object in Universal time. |
| setUTCMonth(month, [day]) | Sets the month in Universal time. |
| setUTCDate(day\_of\_month) | Sets the day of the month in Universal time. |
| setUTCHours(hours, [minutes], [seconds], [millisec]) | Sets the hours in Universal time. |
| setUTCMinutes(minutes, [seconds], [millisec]) | Sets the minutes in Universal time. |
| setUTCSeconds(seconds, [millisec]) | Sets the seconds in Universal time. |
| setUTCMilliseconds(milli) | Sets the milliseconds in Universal time. |
|  |  |
| toGMTString() | Converts a date to a string, using the GMT conventions. Deprecated in favor of toUTCString(). |
| toLocaleString() | Converts a date to a string, using current locale conventions. |
| toLocaleDateString() | Returns the date portion of the Date as a string, using current locale conventions. |
| toLocaleTimeString() | Returns the time portion of the Date as a string, using current locale conventions. |
| toString() | Converts a Date to human-readable string. |
| toUTCString() | Converts a Date to human-readable string, in Universal time. |
| parse(datestring) | Returns the number of milliseconds in a date string since 1/1/1970. (datestring: a string containing the date/time to be parsed). |
| UTC(year, month, [day], [hours], [minutes], [seconds], [milli]) | Returns the number of milliseconds in a date string since 1/1/1970, Universal time. |
| valueOf() | Converts a Date to milliseconds. Same as getTime();. |

**http://www.javascriptkit.com/jsref/bullet.gifExamples**

**http://www.javascriptkit.com/Red_CurlyC035.gifExample 1- write out current date**

To write out today's date for example, you would do:

<script type="text/javascript">  
  
var mydate= new Date()  
var theyear=mydate.getFullYear()  
var themonth=mydate.getMonth()+1  
var thetoday=mydate.getDate()  
  
document.write("Today's date is: ")  
document.write(theyear+"/"+themonth+"/"+thetoday)  
  
</script>

**Output:**

**http://www.javascriptkit.com/Red_CurlyC035.gifExample 2- calculate day of week of a date**

Below example returns the day of the week a specific past date falls on:

birthday = new Date(1978,2,11)  
weekday = birthday.getDay()  
alert(weekday) //alerts 6, or Saturday

**http://www.javascriptkit.com/Red_CurlyC035.gifExample 3- calculate number of days expired**

This example calculates the number of days passed since the Year 2000:

var today=new Date()  
var year2000=new Date(2000,0,1)  
var diff=today-year2000 //unit is milliseconds  
diff=Math.round(diff/1000/60/60/24) //contains days passed since Year 2000

http://www.javascriptkit.com/Red_CurlyC035.gif**Example 4- set date to be a future date**

This example sets the Date object to be 3 days into the future:

var today=new Date()  
today.setDate(today.getDate()+3) //today now is set to be 3 days into the future