## Date Function

## - date()

The date() function formats a local time/date.

## date(format,timestamp)

| Parameter | Description |
| :---: | :---: |
| format | Required. Specifies how to return the result: <br> - d - The day of the month (from 01 to 31) <br> - D - A textual representation of a day (three letters) <br> - j - The day of the month without leading zeros (1 to 31) <br> - I (lowercase 'L') - A full textual representation of a day <br> - $\quad \mathrm{N}$ - The ISO-8601 numeric representation of a day (1 for Monday through 7 for Sunday) <br> - S - The English ordinal suffix for the day of the month (2 characters st, nd, rd or th. Works well with j ) <br> - w-A numeric representation of the day ( 0 for Sunday through 6 for Saturday) <br> - z - The day of the year (from 0 through 365) <br> - W - The ISO-8601 week number of year (weeks starting on Monday) <br> - F - A full textual representation of a month (January through December) <br> - m-A numeric representation of a month (from 01 to 12) <br> - M - A short textual representation of a month (three letters) <br> - n - A numeric representation of a month, without leading zeros (1 to 12 ) <br> - $t$ - The number of days in the given month <br> - L - Whether it's a leap year ( 1 if it is a leap year, 0 otherwise) <br> - Y - A four digit representation of a year <br> - y - A two digit representation of a year <br> - a - Lowercase am or pm <br> - A - Uppercase AM or PM <br> - h-12-hour format of an hour (01 to 12) <br> - H-24-hour format of an hour (00 to 23) <br> - i - Minutes with leading zeros (00 to 59) <br> - s - Seconds, with leading zeros (00 to 59) |
| timestamp | Optional. |

## Example

```
<?php
echo("Result with date():<br />");
echo(date("l") . "<br />");
echo(date("l dS \of F Y h:i:s A") . "<br />");
?>
```

The output of the code above could be something like this:

```
Result with date():
Tuesday
Tuesday 24th of January 2006 02:41:22 PM
```


## - getdate()

The getdate() function returns an array that contains date and time information for a Unix timestamp. The returning array contains ten elements with relevant information needed when formatting a date string:

- [seconds] - seconds
- [minutes]-minutes
- [hours] - hours
- [mday] - day of the month
- [wday] - day of the week
- [mon] - month
- [year] - year
- [yday] - day of the year
- [weekday] - name of the weekday
- [month] - name of the month


## getdate(timestamp)

| Parameter | Description |
| :--- | :--- |
| timestamp | Optional. Specifies the time in Unix time format |

## Example 1

```
<?php
print_r(getdate());
?>
```

The output of the code above could be:

```
Array
(
[seconds] => 45
[minutes] => 52
[hours] => 14
[mday] => 24
[wday] => 2
[mon] => 1
[year] => 2006
[yday] => 23
[weekday] => Tuesday
[month] => January
[0] => 1138110765
)
```

Example 2

```
<?php
```

\$my_t=getdate(date("U"));
print("\$my_t[weekday], \$my_t[month] \$my_t[mday], \$my_t[year]");
?>

The output of the code above could be:

```
Wednesday, January 25, 2006
```


## - checkdate()

The checkdate() function returns true if the specified date is valid, and false otherwise.
A date is valid if:

- month is between 1 and 12 inclusive
- day is within the allowed number of days for the particular month
- year is between 1 and 32767 inclusive
checkdate(month, day, year)

| Parameter | Description |
| :--- | :--- |
| month | Required. Specifies the month |
| day | Required. Specifies the day |
| year | Required. Specifies the year |

## Example

<?php
var_dump (checkdate (12,31,2000));
echo "<br>";
var_dump (checkdate (2,29,2003));
echo "<br>";
var_dump (checkdate (2,29,2004));
```
echo "<br>";
```
echo (checkdate (12,31,2000))."<br>";
echo (checkdate \((2,29,2003)) . "<b r>" ;\)
echo (checkdate (2,29,2004))."<br>";
?>
The output of the code above will be:

```
bool(true)
bool(false)
bool(true)
1
1
```


## - time()

The time() function returns the current time as a Unix timestamp (the number of seconds since January 11970 00:00:00 GMT).
time(void)
Note: Calling this function is identical to calling mktime() with no parameters, or calling date("U").

Example

```
<?php
$t=time();
echo($t . "<br />");
echo(date("D F d Y",$t));
?>
```

The output of the code above could be:
1138618081
Mon January 302006

## - mktime()

The mktime() function returns the Unix timestamp for a date. This timestamp contains the number of seconds between the Unix Epoch (January 11970 00:00:00 GMT) and the time specified.
mktime(hour,minute,second, month,day,year,is_dst)

| Parameter | Description |
| :--- | :--- |
| hour | Optional. Specifies the hour |
| minute | Optional. Specifies the minute |
| second | Optional. Specifies the second |
| month | Optional. Specifies the numerical month |
| day | Optional. Specifies the day |
| year | Optional. Specifies the year. The valid range for year is on some <br> systems between 1901 and 2038. However this limitation is <br> overcome in PHP 5 |
| is_dst | Optional. Set this parameter to 1 if the time is during daylight <br> savings time (DST), 0 if it is not, or -1 (the default) if it is <br> unknown. If it's unknown, PHP tries to find out itself (which may <br> cause unexpected results). |

Note: If the arguments are invalid, the function returns false (PHP versions before 5.1 returns -1).

## Example

```
<?php
echo(date("M-d-Y",mktime(0,0,0,12,36,2001))."<br />");
echo(date("M-d-Y",mktime(0,0,0,14,1,2001))."<br />");
echo(date("M-d-Y",mktime(0,0,0,1,1,2001))."<br />");
echo(date("M-d-Y",mktime(0,0,0,1,1,99))."<br />");
?>
```

The output of the code above would be:

```
Jan-05-2002
Feb-01-2002
Jan-01-2001
Jan-01-1999
```


## What is Unix Epoch?

Unix Time is represented by a 32 bit whole number (an integer) that can be positive or negative (signed). Unix was originally developed in the 60s and 70s so the "start" of Unix Time was set to January 1st 1970 at midnight GMT (Greenwich Mean Time) - this date/time was assigned the Unix Time value of 0 . This is what is know as the Unix Epoch.

The end of Unix Time will occur on January 19, 2038 03:14:07 GMT. On January 19, 2038 03:14:08 GMT all computers that still use 32 bit Unix Time will overflow. This is known as the "Year 2038 problem". Some believe this will be a more significant problem than the "Year 2000 problem". The fix for the Year 2038 problem is to store Unix Time in a 64 bit integer. This is already underway in most 64 bit Operating Systems but many systems may not be updated by 2038.

