

# How can I convert a date to numeric in R? Can you provide some examples?

Authored by  
**stats writer**

May 12, 2024

## RECOMMENDED CITATION

stats writer (2024). *How can I convert a date to numeric in R? Can you provide some examples?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=143784>

To convert a date to numeric in R, you can use the "as.numeric" function. This function will convert the date into the number of days since January 1, 1970. For example, the date "January 1, 2000" would be converted to the number "10957". Another example is the date "March 17, 2021" which would be converted to "18754". This conversion allows for easier calculations and comparisons between dates.

## Convert Date to Numeric in R (With Examples)

There are two methods you can use to convert date values to numeric values in R:

### Method 1: Use as.numeric()

```
as.numeric(my_date)
```

This will return the number of seconds that have passed between your date object and 1/1/1970.

### Method 2: Use Functions from the lubridate package

```
library(lubridate)
```

```
#get seconds value in date object
```

```
second(my_date)
```

```
#get minutes value in date object
```

```
minute(my_date)
```

...

```
#get year value in date object  
year(my_date)
```

This will return the value for the seconds, minutes, years, etc. from your date object.

The following examples show how to use each method in practice.

Method 1: Use `as.numeric()`

The following code shows how to convert a date object to numeric using the `as.numeric()` function:

```
#create date object  
my_date <- as.POSIXct("10/14/2021 5:35:00 PM",  
format="%m/%d/%Y %H:%M:%S %p")
```

```
#view date object  
my_date
```

```
"2021-10-14 05:35:00 UTC"
```

```
#convert date object to number of seconds since  
1/1/1970
```

```
as.numeric(my_date)
```

```
1634189700
```

```
#convert date object to number of days since 1/1/1970
```

```
as.numeric(my_date) / 86400
```

```
18914.23
```

```
#convert date object to number of years since 1/1/1970
```

```
as.numeric(my_date) / 86400 / 365
```

```
51.81982
```

Based on the output we can see:

There is a difference of 1,634,189,700 seconds between our date object and 1/1/1970. There is a difference of 18,914.23 days between our date object and 1/1/1970. There is a difference of 51.81982 years between our date object and 1/1/1970.

Method 2: Use Functions from the lubridate Package

The following code shows how to convert a date object to numeric using functions from the package in R:

```
library(lubridate)
```

```
#create date object
```

```
my_date <- as.POSIXct("10/14/2021 5:35:00 PM",  
format="%m/%d/%Y %H:%M:%S %p")
```

```
#view date object
```

```
my_date
```

```
"2021-10-14 05:35:00 UTC"
```

```
#extract various numerical values from date object
```

```
second(my_date)
```

```
0
```

```
minute(my_date)
```

```
35
```

```
hour(my_date)
```

```
5
```

```
day(my_date)
```

```
14
```

**month(my\_date)**

**10**

**year(my\_date)**

**2021**

**Using these functions, we can extract the seconds, minutes, hours, days, months, and year values from our date object.**

**The following tutorials explain how to perform other common conversions in R:**