

How to Convert Numbers to Dates in R?

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In R, the `as.Date()` function can be used to convert numeric values to dates. This function takes a numeric vector as input and transforms it into an R date object. The `as.Date()` function also allows you to specify the format of the date string, so you can ensure that the date is converted into the correct format. Additionally, the `as.POSIXct()` function can be used to convert a numeric vector to a date in a specific time zone.

Often you may need to convert numbers to date formats in R. The easiest way to do this is by using the package, which has several helpful functions for dealing with dates in R.

This tutorial provides several examples of how to use these functions in practice.

Example 1: Convert Integers to Dates

The following code shows how to convert a column of integer values in a data frame to a date format by using the `ymd()` function:

```
library(lubridate)
```

```
#create data frame
```

```
df <- data.frame(date = c(20201022, 20201023, 20201026, 20201027, 20201028),  
sales = c(4, 7, 8, 9, 12))
```

```
#convert date column from numeric to year-month-date format
```

```
df$date <- ymd(df$date)
```

```
#view data frame
```

```
df
```

```
date sales
```

```
1 2020-10-22 4
```

```
2 2020-10-23 7
```

```
3 2020-10-26 8
```

```
4 2020-10-27 9
```

```
5 2020-10-28 12
```

```
#view class of date column
```

```
class(df$date)
```

```
"Date"
```

Note that the `lubridate` package has several functions to handle different date formats.

For example, the following shows how to convert a column of integer values in a data frame to a date format by using the **ydm()** function:

library(lubridate)

```
#create data frame
df <- data.frame(date = c(20202210, 20202310, 20202610, 20202710, 20202810),
sales = c(4, 7, 8, 9, 12))
```

```
#convert date column from numeric to year-month-date format
df$date <- ydm(df$date)
```

```
#view data frame
df
```

```
date sales
1 2020-10-22 4
2 2020-10-23 7
3 2020-10-26 8
4 2020-10-27 9
5 2020-10-28 12
```

```
#view class of date column
class(df$date)
```

```
"Date"
```

Example 2: Convert Months & Years to Dates

The following code shows how to convert a column of numeric values that represent the number of months from January 1st, 2010 to a date format by using the **months()** function:

library(lubridate)

```
#create data frame
df <- data.frame(date = c(11, 15, 18, 22, 24),
sales = c(4, 7, 8, 9, 12))
```

```
#convert date column from numeric to year-month-date format
df$date <- as.Date('2010-01-01') + months(df$date)
```

```
#view data frame
df
```

```
date sales
1 2010-12-01 4
2 2011-04-01 7
3 2011-07-01 8
4 2011-11-01 9
5 2012-01-01 12
```

```
#view class of date column
class(df$date)
```

```
"Date"
```

And the following code shows how to convert a column of numeric values that represent the number of years from January 1st, 2010 to a date format by using the **years()** function:

```
library(lubridate)
```

```
#create data frame
```

```
df <- data.frame(date = c(11, 15, 18, 22, 24),
sales = c(4, 7, 8, 9, 12))
```

```
#convert date column from numeric to year-month-date format
```

```
df$date <- as.Date('2010-01-01') + years(df$date)
```

```
#view data frame
```

```
df
```

```
date sales
1 2021-01-01 4
2 2025-01-01 7
3 2028-01-01 8
4 2032-01-01 9
5 2034-01-01 12
```

```
#view class of date column
```

```
class(df$date)
```

```
"Date"
```

Bonus: Refer to [this link](#) to gain a better understanding of the functions available in the lubridate package.

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