

# How can I add and subtract months from a date in R?

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## RECOMMENDED CITATION

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To add or subtract months from a date in R, you can use the built-in functions "months" and "months\_to\_date". These functions allow you to specify the number of months you want to add or subtract, and they will automatically adjust the date accordingly. This can be useful for tasks such as forecasting or creating time series data. By utilizing these functions, you can easily manipulate dates and perform calculations based on a specific month. Additionally, R offers various other functions and packages that can assist with date manipulation, making it a versatile tool for working with time-based data.

## Add and Subtract Months from a Date in R

You can use the following functions from the package in R to quickly add and subtract months from a date:

### Method 1: Add Months

```
#add two months to date  
my_date %m+% months(2)
```

### Method 2: Subtract Months

```
#subtract two months from date  
my_date %m-% months(2)
```

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

### Example 1: Add Months to Date

The following code shows how to add two months to a

**date in R:**

```
library(lubridate)
```

```
#define date
```

```
my_date <- as.Date("2022-7-15")
```

```
#add two months to date
```

```
my_date %m+% months(2)
```

```
"2022-09-15"
```

**Notice that two months have been added to the original date of 7/15/2022 to produce a new date of 9/15/2022.**

**Example 2: Subtract Months from Date**

**The following code shows how to subtract two months from a date in R:**

```
library(lubridate)
```

```
#define date
```

```
my_date <- as.Date("2022-7-15")
```

```
#subtract two months from date
```

```
my_date %m-% months(2)
```

```
"2022-05-15"
```

Notice that two months have been subtracted from the original date of 7/15/2022 to produce a new date of 5/15/2022.

Example 3: Add & Subtract Months in Data Frame

Suppose we have the following data frame in R:

```
#create data frame
df <- data.frame(date=as.Date(c("2022-3-14",
"2022-5-29", "2022-7-15")),
sales=c(140, 119, 138))
```

```
#view data frame
```

```
df
```

```
date sales
```

```
1 2022-03-14 140
```

```
2 2022-05-29 119
```

```
3 2022-07-15 138
```

```
library(lubridate)
```

```
#create new column that adds two months to each date  
df$two_months_after <- df$date %m+% months(2)
```

```
#create new column that subtracts two months from  
each date
```

```
df$two_months_before <- df$date %m-% months(2)
```

```
#view updated data frame
```

```
df
```

```
date sales two_months_after two_months_before
```

```
1 2022-03-14 140 2022-05-14 2022-01-14
```

```
2 2022-05-29 119 2022-07-29 2022-03-29
```

```
3 2022-07-15 138 2022-09-15 2022-05-15
```

**Notice that two new columns have been added to the data frame.**