

# What are some examples of rounding numbers in R?

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## RECOMMENDED CITATION

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Rounding numbers is a commonly used mathematical operation in the R programming language. It involves adjusting a number to the nearest whole number or a specified decimal place. Some examples of rounding numbers in R include using the `round()` function to round a number to the nearest integer, the `floor()` function to round a number down to the nearest integer, and the `ceiling()` function to round a number up to the nearest integer. Additionally, the `signif()` function can be used to round a number to a specified number of significant digits. Rounding numbers is essential in data analysis and can be applied in various scenarios such as financial calculations, data visualization, and statistical analysis.

## Round Numbers in R (5 Examples)

You can use the following functions to round numbers in R:

**`round(x, digits = 0)`:** Rounds values to specified number of decimal places.

**`signif(x, digits = 6)`:** Rounds values to specified number of significant digits.

**`ceiling(x)`:** Rounds values up to nearest integer.

**`floor(x)`:** Rounds values down to nearest integer.

**`trunc(x)`:** Truncates (cuts off) decimal places from values.

The following examples show how to use each of these functions in practice.

Example 1: `round()` Function in R

The following code shows how to use the `round()`

## function in R:

```
#define vector of data
```

```
data <- c(.3, 1.03, 2.67, 5, 8.91)
```

```
#round values to 1 decimal place
```

```
round(data, digits = 1)
```

```
0.3 1.0 2.7 5.0 8.9
```

Example 2: signif() Function in R

The following code shows how to use the signif() function to round values to a specific number of significant digits in R:

```
#define vector of data
```

```
data <- c(.3, 1.03, 2.67, 5, 8.91)
```

```
#round values to 3 significant digits
```

```
signif(data, digits = 3)
```

```
0.30 1.03 2.67 5.00 8.91
```

Example 3: ceiling() Function in R

The following code shows how to use the ceiling()

**function to round values up to the nearest integer:**

```
#define vector of data
```

```
data <- c(.3, 1.03, 2.67, 5, 8.91)
```

```
#round values up to nearest integer
```

```
ceiling(data)
```

```
1 2 3 5 9
```

**Example 4: floor() Function in R**

**The following code shows how to use the floor() function to round values down to the nearest integer:**

```
#define vector of data
```

```
data <- c(.3, 1.03, 2.67, 5, 8.91)
```

```
#round values down to nearest integer
```

```
floor(data)
```

```
0 1 2 5 8
```

**Example 5: trunc() Function in R**

**The following code shows how to use the trunc() function to truncate (cut off) decimal places from**

**values:**

**#define vector of data**

**data <- c(.3, 1.03, 2.67, 5, 8.91)**

**#truncate decimal places from values**

**trunc(data)**

**0 1 2 5 8**

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