

# nf()

Converts a `Number` into a `String` with a given number of digits.

`nf()` converts numbers such as `123.45` into strings formatted with a set number of digits, as in `'123.4500'`.

The first parameter, `num`, is the number to convert to a string. For example, calling `nf(123.45)` returns the string `'123.45'`. If an array of numbers is passed, as in `nf([123.45, 67.89])`, an array of formatted strings will be returned.

The second parameter, `left`, is optional. If a number is passed, as in `nf(123.45, 4)`, it sets the minimum number of digits to include to the left of the decimal place. If `left` is larger than the number of digits in `num`, then unused digits will be set to 0. For example, calling `nf(123.45, 4)` returns the string `'0123.45'`.

The third parameter, `right`, is also optional. If a number is passed, as in `nf(123.45, 4, 1)`, it sets the minimum number of digits to include to the right of the decimal place. If `right` is smaller than the number of decimal places in `num`, then `num` will be rounded to the given number of decimal places. For example, calling `nf(123.45, 4, 1)` returns the string `'0123.5'`. If `right` is larger than the number of decimal places in `num`, then unused decimal places will be set to 0. For example, calling `nf(123.45, 4, 3)` returns the string `'0123.450'`.

When the number is negative, for example, calling `nf(-123.45, 5, 2)` returns the string `'-00123.45'`.

## Examples

```
123.45
-0123.45
0123.45
0123.5

function setup() {
  createCanvas(100, 100);

  background(200);

  // Style the text.
  textAlign(LEFT, CENTER);
  textSize(16);

  // Create a number variable.
  let number = 123.45;

  // Display the number as a string.
  let formatted = nf(number);
  text(formatted, 20, 20);

  let negative = nf(-number, 4, 2);
  text(negative, 20, 40);

  // Display the number with four digits
  // to the left of the decimal.
  let left = nf(number, 4);
  text(left, 20, 60);

  // Display the number with four digits
  // to the left of the decimal and one
  // to the right.
  let right = nf(number, 4, 1);
  text(right, 20, 80);

  describe()
}
```

## Syntax

`nf(num, [left], [right])`

`nf(nums, [left], [right])`

## Parameters

<code>num</code>	<code>Number String</code> : number to format.
<code>left</code>	<code>Integer String</code> : number of digits to include to the left of the decimal point.
<code>right</code>	<code>Integer String</code> : number of digits to include to the right of the decimal point.
<code>nums</code>	<code>Number[]</code> : numbers to format.

## Returns

`String`: formatted string.

This page is generated from the comments in `src/utilities/string_functions.js`. Please feel free to edit it and submit a pull request!

## Related References

`join`  
Combines an array of strings into one string.

`match`  
Applies a regular expression to a string and returns an array with the first match.

`matchAll`  
Applies a regular expression to a string and returns an array of matches.

`nf`  
Converts a `Number` into a `String` with a given number of digits.

