# Package 'signs'

October 14, 2022

Title Insert Proper Minus Signs

Version 0.1.2	
<b>Description</b> Provides convenience functions to replace hyphen-minuses (ASCII 45) with proper minus signs (Unicode character 2212). The true minus matches the plus symbol in width, line thickness, and height above the baseline. It was designed for mathematics, looks better in presentation, and is understood properly by screen readers.	
<pre>URL https://benjaminwolfe.github.io/signs</pre>	
BugReports https://github.com/BenjaminWolfe/signs/issues	
License MIT + file LICENSE	
Encoding UTF-8	
LazyData true	
Imports scales, rlang (>= 0.4.0)	
RoxygenNote 7.0.2	
<b>Suggests</b> ggplot2, dplyr, ggrepel, testthat (>= 2.1.0), knitr, rmarkdown, covr	
VignetteBuilder knitr	
NeedsCompilation no	
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signs

Add proper minus signs

## **Description**

The true minus sign (Unicode 2212) – neither an em dash, nor an en dash, nor the usual hyphenminus – is highly underrated. It makes everything look better!

## Usage

```
signs(
    x,
    ...,
    format = getOption("signs.format", scales::number),
    add_plusses = getOption("signs.add.plusses", FALSE),
    trim_leading_zeros = getOption("signs.trim.leading.zeros", FALSE),
    label_at_zero = getOption("signs.label.at.zero", "none")
)
```

### **Arguments**

x Numeric vector.

... Other arguments passed on to format.

format Any function that takes a numeric vector and returns a character vector, such

as scales::number, scales::comma, or scales::percent (all of which are

documented at number\_format).

add\_plusses Logical. Should positive values have plus signs?

trim\_leading\_zeros

Logical. Should signs trim leading zeros from values of x between -1 and 1?

label\_at\_zero Character. What should be returned when x = 0? Options "none" (no change),

"blank" (a zero-length string), or "symbol" (add a plus-minus symbol).

### **Details**

add\_plusses, trim\_leading\_zeros, and label\_at\_zero are offered for convenience.

The options signs.format, signs.add.plusses, signs.trim.leading.zeros, and signs.label.at.zero are set when the package is loaded to scales::number, FALSE, FALSE, and "none", respectively. If the package is not loaded and the these options are not otherwise set, signs will use those defaults.

label\_at\_zero is applied *after* format; that is, if it is "blank" and you've specified an accuracy of 0.1, -0.04 will show as blank.

#### Value

A UTF-8 character vector

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## **Examples**

```
x <- seq(-5, 5)
scales::number(x)
signs(x)
signs(x, accuracy = 1, scale = 1, format = scales::percent)
signs(x, add_plusses = TRUE)
signs(x, add_plusses = TRUE, label_at_zero = "blank")
signs(x, add_plusses = TRUE, label_at_zero = "symbol")
signs(x, accuracy = .1, scale = .1, trim_leading_zeros = TRUE)</pre>
```

signs\_format

A function factory to add proper minus signs

## Description

Returns a function that will format numeric vectors with proper minus signs.

## Usage

```
signs_format(
    ...,
    format = getOption("signs.format", scales::number),
    add_plusses = getOption("signs.add.plusses", FALSE),
    trim_leading_zeros = getOption("signs.trim.leading.zeros", FALSE),
    label_at_zero = getOption("signs.label.at.zero", "none")
)
```

## **Arguments**

... Other arguments passed on to format.

Any function that takes a numeric vector and returns a character vector, such as scales::number, scales::comma, or scales::percent (all of which are documented at number\_format).

add\_plusses Logical. Should positive values have plus signs?

trim\_leading\_zeros

Logical. Should signs trim leading zeros from values of x between -1 and 1?

label\_at\_zero Character. What should be returned when x = 0? Options "none" (no change), "blank" (a zero-length string), or "symbol" (add a plus-minus symbol).

## **Details**

See signs for details.

## Value

A function that takes a numeric vector and returns a UTF-8 character vector

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## Examples

```
x <- seq(-5, 5)
scales::number(x)

f1 <- signs_format()
f1(x)

f2 <- signs_format(accuracy = 1, scale = 1, format = scales::percent)
f2(x)

f3 <- signs_format(add_plusses = TRUE)
f3(x)

f4 <- signs_format(add_plusses = TRUE, label_at_zero = "blank")
f4(x)

f5 <- signs_format(add_plusses = TRUE, label_at_zero = "symbol")
f5(x)

f6 <- signs_format(accuracy = .1, scale = .1, trim_leading_zeros = TRUE)
f6(x)</pre>
```

## **Index**

```
\label{eq:number_format} \begin{split} & \text{number\_format, 2, 3} \\ & \text{signs, 2, 3} \\ & \text{signs\_format, 3} \end{split}
```