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| Constants {base} | R Documentation |

**Built-in Constants**

**Description**

Constants built into **R**.

**Usage**

LETTERS

letters

month.abb

month.name

pi

**Details**

**R** has a small number of built-in constants.

The following constants are available:

* LETTERS: the 26 upper-case letters of the Roman alphabet;
* letters: the 26 lower-case letters of the Roman alphabet;
* month.abb: the three-letter abbreviations for the English month names;
* month.name: the English names for the months of the year;
* pi: the ratio of the circumference of a circle to its diameter.

These are implemented as variables in the base namespace taking appropriate values.

**References**

Becker, R. A., Chambers, J. M. and Wilks, A. R. (1988) *The New S Language*. Wadsworth & Brooks/Cole.

**See Also**

[data](http://127.0.0.1:14695/library/base/help/data), [DateTimeClasses](http://127.0.0.1:14695/library/base/help/DateTimeClasses).

[Quotes](http://127.0.0.1:14695/library/base/help/Quotes) for the parsing of character constants, [NumericConstants](http://127.0.0.1:14695/library/base/help/NumericConstants) for numeric constants.

**Examples**

## John Machin (ca 1706) computed pi to over 100 decimal places

## using the Taylor series expansion of the second term of

pi - 4\*(4\*atan(1/5) - atan(1/239))

## months in English

month.name

## months in your current locale

format(ISOdate(2000, 1:12, 1), "%B")

format(ISOdate(2000, 1:12, 1), "%b")