NAME

trunc, truncf, truncl − round to integer, toward zero

SYNOPSIS

#include <math.h>

double trunc(double *x***);**
float truncf(float *x***);**
long double truncl(long double *x***);**

Link with *−lm*.

Feature Test Macro Requirements for glibc (see **feature_test_macros**(7)):

trunc(), **truncf**(), **truncl**():
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

DESCRIPTION

These functions round *x* to the nearest integer value that is not larger in magnitude than *x*.

RETURN VALUE

These functions return the rounded integer value, in floating format.

If *x* is integral, infinite, or NaN, *x* itself is returned.

ERRORS

No errors occur.

VERSIONS

These functions first appeared in glibc in version 2.1.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes**(7).

Interface	Attribute	Value
trunc(), **truncf**(), **truncl**()	Thread safety	MT-Safe

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

NOTES

The integral value returned by these functions may be too large to store in an integer type (*int*, *long*, etc.). To avoid an overflow, which will produce undefined results, an application should perform a range check on the returned value before assigning it to an integer type.

SEE ALSO

ceil(3), **floor**(3), **lrint**(3), **nearbyint**(3), **rint**(3), **round**(3)

COLOPHON

This page is part of release 5.02 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man−pages/.