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 not larger in absolute value.

RETURN VALUE

These functions return the rounded integer value.

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 4.16 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/.