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# Red Hat Enterprise Linux Release 9.2 Manual Pages on 'fmodl.3' command

### \$ man fmodl.3

FMOD(3) Linux Programmer's Manual FMOD(3)

NAME

fmod, fmodf, fmodl - floating-point remainder function

#### **SYNOPSIS**

#include <math.h>

double fmod(double x, double y);

float fmodf(float x, float y);

long double fmodl(long double x, long double y);

Link with -lm.

Feature Test Macro Requirements for glibc (see feature\_test\_macros(7)):

fmodf(), fmodl():

\_ISOC99\_SOURCE || \_POSIX\_C\_SOURCE >= 200112L

|| /\* Since glibc 2.19: \*/ \_DEFAULT\_SOURCE

|| /\* Glibc versions <= 2.19: \*/ \_BSD\_SOURCE || \_SVID\_SOURCE

## **DESCRIPTION**

These functions compute the floating-point remainder of dividing x by

y. The return value is x - n \* y, where n is the quotient of  $\,x\,$  / y,

rounded toward zero to an integer.

### **RETURN VALUE**

On success, these functions return the value x - n\*y, for some integer n, such that the returned value has the same sign as x and a magnitude less than the magnitude of y.

If x or y is a NaN, a NaN is returned.

If x is an infinity, a domain error occurs, and a NaN is returned.

If y is zero, a domain error occurs, and a NaN is returned.

If x is +0 (-0), and y is not zero, +0 (-0) is returned.

#### **ERRORS**

See math\_error(7) for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Domain error: x is an infinity

errno is set to EDOM (but see BUGS). An invalid floating-point exception (FE\_INVALID) is raised.

Domain error: y is zero

errno is set to EDOM. An invalid floating-point exception

(FE\_INVALID) is raised.

#### **ATTRIBUTES**

For an explanation of the terms used in this section, see at? tributes(7).

?Interface ? Attribute ? Value ?

?fmod(), fmodf(), fmodl() ? Thread safety ? MT-Safe ?

#### **CONFORMING TO**

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

The variant returning double also conforms to SVr4, 4.3BSD, C89.

## **BUGS**

Before version 2.10, the glibc implementation did not set errno to EDOM when a domain error occurred for an infinite x.

### SEE ALSO

remainder(3)

#### **COLOPHON**

This page is part of release 5.10 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

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