



Rocky Enterprise Linux 9.2 Manual Pages on command 'fmod.3'

\$ man fmod.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 $x - n \cdot y$, 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 `attributes(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 <https://www.kernel.org/doc/man-pages/>.

2017-09-15

FMOD(3)