



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

C:\>man remainderf.3

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

NAME

drem, dremf, dreml, remainder, remainderf, remainderl - floating-point remainder function

SYNOPSIS

```
#include <math.h>

/* The C99 versions */

double remainder(double x, double y);
float remainderf(float x, float y);
long double remainderl(long double x, long double y);

/* Obsolete synonyms */

double drem(double x, double y);
float dremf(float x, float y);
long double dreml(long double x, long double y);

Link with -lm.
```

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

```
remainder():
    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || _XOPEN_SOURCE >= 500
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

remainderf(), remainderl():

```

_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
drem(), dremf(), dremf():
/* Since glibc 2.19: */ _DEFAULT_SOURCE
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE

```

DESCRIPTION

These functions compute the remainder of dividing x by y . The return value is $x - n * y$, where n is the value x / y , rounded to the nearest integer. If the absolute value of $x - n * y$ is 0.5, n is chosen to be even.

These functions are unaffected by the current rounding mode (see `fenv(3)`).

The `drem()` function does precisely the same thing.

RETURN VALUE

On success, these functions return the floating-point remainder, $x - n * y$. If the return value is 0, it has the sign of x .

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

If x is an infinity, and y is not a NaN, a domain error occurs, and a NaN is returned.

If y is zero, and x is not a NaN, a domain error occurs, and a NaN 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 and y is not a NaN

`errno` is set to `EDOM` (but see `BUGS`). An invalid floating-point exception (`FE_INVALID`) is raised.

These functions do not set `errno` for this case.

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)`.

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