



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

C:\>man drem.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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