NAME

remquo, remquof, remquol − remainder and part of quotient

SYNOPSIS

#include <math.h>

double remquo(double *x***, double** *y***, int ****quo***);**
float remquof(float *x***, float** *y***, int ****quo***);**
long double remquol(long double *x***, long double** *y***, int ****quo***);**

Link with *−lm*.

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

remquo(), **remquof**(), **remquol**():
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L

DESCRIPTION

These functions compute the remainder and part of the quotient upon division of *x* by *y*. A few bits of the quotient are stored via the *quo* pointer. The remainder is returned as the function result.

The value of the remainder is the same as that computed by the **remainder**(3) function.

The value stored via the *quo* pointer has the sign of *x / y* and agrees with the quotient in at least the low order 3 bits.

For example, *remquo(29.0, 3.0)* returns −1.0 and might store 2. Note that the actual quotient might not fit in an integer.

RETURN VALUE

On success, these functions return the same value as the analogous functions described in **remainder**(3).

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 or *y* is 0, and the other argument is not a NaN
An invalid floating-point exception (**FE_INVALID**) is raised.

These functions do not set *errno*.

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
remquo(), **remquof**(), **remquol**()	Thread safety	MT-Safe

CONFORMING TO

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

SEE ALSO

fmod(3), **logb**(3), **remainder**(3)

COLOPHON

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