

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
<code>remquo()</code> , <code>remquof()</code> , <code>remquol()</code>	Thread safety	MT-Safe

CONFORMING TO

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

SEE ALSO

`fmod(3)`, `logb(3)`, `remainder(3)`

COLOPHON

This page is part of release 5.05 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/>.