

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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