

**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**

This page is part of release 4.10 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->

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