NAME

llrint, llrintf, llrintl, lrintf, lrintf, lrintl - convert to integer

LIBRARY

```
Math Library (libm, -lm)
```

SYNOPSIS

```
#include <math.h>

long long
llrint(double x);

long long
llrintf(float x);

long long
llrintl(long double x);

long
lrint(double x);

long
lrintf(float x);
```

DESCRIPTION

lrintl(long double x);

The **lrint**() function returns the integer nearest to its argument x according to the current rounding mode. If the rounded result is too large to be represented as a *long* value, an invalid exception is raised and the return value is undefined. Otherwise, if x is not an integer, **lrint**() raises an inexact exception. When the rounded result is representable as a *long*, the expression **lrint**(x) is equivalent to (*long*)**rint**(x) (although the former may be more efficient).

The <code>llrint()</code>, <code>llrintf()</code>, <code>llrintf()</code>, and <code>lrintl()</code> functions differ from <code>lrint()</code> only in their input and output types.

SEE ALSO

```
lround(3), math(3), rint(3), round(3)
```

STANDARDS

These functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

The **llrint()**, **llrintf()**, **lrint()**, and **lrintf()** routines first appeared in FreeBSD 5.4. The long double variants were introduced in FreeBSD 8.0.