



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'llrint.3' command***

**\$ man llrint.3**

LRINT(3)                      Linux Programmer's Manual                      Lrint(3)

### NAME

lrint, lrintf, lrintl, llrint, llrintf, llrintl - round to nearest in?

teger

### SYNOPSIS

```
#include <math.h>
```

```
long lrint(double x);
```

```
long lrintf(float x);
```

```
long lrintl(long double x);
```

```
long long llrint(double x);
```

```
long long llrintf(float x);
```

```
long long llrintl(long double x);
```

Link with -lm.

Feature Test Macro Requirements for glibc (see feature\_test\_macros(7)):

All functions shown above:

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

### DESCRIPTION

These functions round their argument to the nearest integer value, using the current rounding direction (see fesetround(3)).

Note that unlike the rint(3) family of functions, the return type of these functions differs from that of their arguments.

### RETURN VALUE

These functions return the rounded integer value.

If x is a NaN or an infinity, or the rounded value is too large to be stored in a long (long long in the case of the ll\* functions), then a domain error occurs, and the return value is unspecified.

## 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 a NaN or infinite, or the rounded value is too large

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   ?

????????????????????????????????????????????????????????????

?lrint(), lrintf(), lrintl(), ? Thread safety ? MT-Safe ?

?llrint(), llrintf(), llrintl() ?                ?                ?

????????????????????????????????????????????????????????????

## CONFORMING TO

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

## SEE ALSO

`ceil(3)`, `floor(3)`, `lround(3)`, `nearbyint(3)`, `rint(3)`, `round(3)`

## COLOPHON

This page is part of release 5.10 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-pages/>.