



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'lrint.3'***

**C:\>man lrint.3**

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

### NAME

lrint, lrintf, lrintl, llrint, llrintf, llrintl - round to nearest integer

### SYNOPSIS

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

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

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

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

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

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

```
long long int 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 5.05 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/>.