



Linux Ubuntu 26.04 Manual Pages on command 'sqrt.3'

\$ man sqrt.3

sqrt(3) Library Functions Manual sqrt(3)

NAME

sqrt, sqrtf, sqrtl - square root function

LIBRARY

Math library (libm, -lm)

SYNOPSIS

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

```
double sqrt(double x);
```

```
float sqrtf(float x);
```

```
long double sqrtl(long double x);
```

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

sqrtf(), sqrtl():

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

```
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
```

```
|| /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions return the nonnegative square root of x.

RETURN VALUE

On success, these functions return the square root of x.

If x is a NaN, a NaN is returned.

If x is +0 (-0), +0 (-0) is returned.

If x is positive infinity, positive infinity is returned.

If x is less than -0, 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 less than -0

errno is set to EDOM. An invalid floating-point exception (FE_INVALID) is raised.

ATTRIBUTES

For an explanation of the terms used in this section, see `attributes(7)`.

[illegible]

? Interface	? Attribute	? Value	?
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[illegible]

Function	Thread safety	MT-Safe
<code>sqrt()</code> , <code>sqrtf()</code> , <code>sqrtl()</code>	Yes	Yes

[illegible]

STANDARDS

C11, POSIX.1-2008.

HISTORY

C99, POSIX.1-2001.

The variant returning double also conforms to SVr4, 4.3BSD, C89.

SEE ALSO

cbrt(3), csqrt(3), hypot(3)

Linux man-pages 6.17

2026-02-08

 $\sqrt{3}$