NAME

cbrt, cbrtf, cbrtl − cube root function

SYNOPSIS

```
#include <math.h>

double cbrt(double x);
float cbrtf(float x);
long double cbrtl(long double x);
```

Link with *−lm*.

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

cbrt():
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
|| _XOPEN_SOURCE >= 500
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE

cbrtf(), **cbrtl**():
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE

DESCRIPTION

These functions return the (real) cube root of *x*. This function cannot fail; every representable real value has a representable real cube root.

RETURN VALUE

These functions return the cube root of *x*.

If *x* is +0, −0, positive infinity, negative infinity, or NaN, *x* is returned.

ERRORS

No errors occur.

ATTRIBUTES

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

Interface	Attribute	Value
cbrt(), **cbrtf**(), **cbrtl**()	Thread safety	MT-Safe

CONFORMING TO

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

SEE ALSO

pow(3), **sqrt**(3)

COLOPHON

This page is part of release 5.02 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/.