NAME

  cbrt, **cbrtf**, **cbrtl**, **sqrt**, **sqrtf**, **sqrtl** - cube root and square root functions

LIBRARY

  Math Library (libm, -lm)

SYNOPSIS

  #include <math.h>

  double
  cbrt(*double x*);

  float
  cbrtf(*float x*);

  long double
  cbrtl(*long double x*);

  double
  sqrt(*double x*);

  float
  sqrtf(*float x*);

  long double
  sqrtl(*long double x*);

DESCRIPTION

  The **cbrt**(), **cbrtf**(), and **cbrtl**() functions compute the cube root of *x*.

  The **sqrt**(), **sqrtf**(), and **sqrtl**() functions compute the non-negative square root of *x*.

RETURN VALUES

  The **cbrt**(), **cbrtf**(), and **cbrtl**() functions return the requested cube root. The **sqrt**(), **sqrtf**(), and **sqrtl**()
  functions return the requested square root unless an error occurs. An attempt to take the **sqrt**() of
  negative *x* raises an invalid exception and causes an NaN to be returned (except that the square root of -0
  is valid and equal to -0.)

SEE ALSO

  fenv(3), math(3)

STANDARDS

The **cbrt**(), **cbrtf**(), **cbrtl**(), **sqrt**(), **sqrtf**(), and **sqrtl**() functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

The **cbrt**() function appeared in 4.3BSD. The **sqrt**() function appeared in Version 2 AT&T UNIX. **sqrtl**() function appeared in FreeBSD 8.0. The **cbrtl**() function appeared in FreeBSD 9.0.