NAME
acos, **acosf**, **acosl** - arc cosine functions

LIBRARY
Math Library (libm, -lm)

SYNOPSIS
#include <math.h>

double
acos(*double x*);

float
acosf(*float x*);

long double
acosl(*long double x*);

DESCRIPTION
The **acos**(), **acosf**(), and **acosl**() functions compute the principal value of the arc cosine of *x*.

RETURN VALUES
These functions return the arc cosine in the range [0, pi] radians. If:

$$|x| > 1,$$

acos(*x*) raises an invalid exception and returns an NaN.

SEE ALSO
asin(3), atan(3), atan2(3), cos(3), cosh(3), fenv(3), math(3), sin(3), sinh(3), tan(3), tanh(3)

STANDARDS
The **acos**(), **acosf**(), and **acosl**() functions conform to ISO/IEC 9899:1999 ("ISO C99").