

NAME

tanh, **tanhf**, **tanhf** - hyperbolic tangent functions

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

#include <math.h>

double

tanh(*double x*);

float

tanhf(*float x*);

long double

tanhf(*long double x*);

DESCRIPTION

The **tanh**(), **tanhf**(), and **tanhf**() functions compute the hyperbolic tangent of x . For a discussion of error due to roundoff, see `math(3)`.

RETURN VALUES

The **tanh**(), **tanhf**(), and the **tanhf**() functions return the hyperbolic tangent value.

SEE ALSO

`acos(3)`, `asin(3)`, `atan(3)`, `atan2(3)`, `cos(3)`, `cosh(3)`, `ctanh(3)`, `math(3)`, `sin(3)`, `sinh(3)`, `tan(3)`

STANDARDS

The **tanh**() function conforms to ISO/IEC 9899:1990 ("ISO C90").

HISTORY

The **tanh**() function first appeared in Version 7 AT&T UNIX.