

**NAME**

**cosh, coshf, coshl** - hyperbolic cosine functions

**LIBRARY**

Math Library (libm, -lm)

**SYNOPSIS**

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

*double*

```
cosh(double x);
```

*float*

```
coshf(float x);
```

*long double*

```
coshl(long double x);
```

**DESCRIPTION**

The **cosh()**, **coshf()**, and **coshl()** functions compute the hyperbolic cosine of *x*.

**SEE ALSO**

acos(3), asin(3), atan(3), atan2(3), ccosh(3), cos(3), math(3), sin(3), sinh(3), tan(3), tanh(3)

**STANDARDS**

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

**HISTORY**

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