

**NAME**

**asinh**, **asinhf**, **asinhf** - inverse hyperbolic sine functions

**LIBRARY**

Math Library (libm, -lm)

**SYNOPSIS**

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

*double*

```
asinh(double x);
```

*float*

```
asinhf(float x);
```

*long double*

```
asinhf(long double x);
```

**DESCRIPTION**

The **asinh()**, **asinhf()**, and **asinhf()** functions compute the inverse hyperbolic sine of the real argument  $x$ . For a discussion of error due to roundoff, see `math(3)`.

**RETURN VALUES**

These functions return the inverse hyperbolic sine of  $x$ .

**SEE ALSO**

`acosh(3)`, `atanh(3)`, `exp(3)`, `math(3)`

**HISTORY**

The **asinh()**, **asinhf()**, and **asinhf()** functions appeared in 4.3BSD, FreeBSD 2.0, and FreeBSD 10.0, respectively.