

**NAME**

**scalbln**, **scalblnf**, **scalblnl**, **scalbn**, **scalbnf**, **scalbnl** - adjust exponent

**LIBRARY**

Math Library (libm, -lm)

**SYNOPSIS**

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

*double*

```
scalbln(double x, long n);
```

*float*

```
scalblnf(float x, long n);
```

*long double*

```
scalblnl(long double x, long n);
```

*double*

```
scalbn(double x, int n);
```

*float*

```
scalbnf(float x, int n);
```

*long double*

```
scalbnl(long double x, int n);
```

**DESCRIPTION**

These routines return  $x * (2^{**n})$  computed by exponent manipulation.

**SEE ALSO**

ieee(3), math(3)

**STANDARDS**

These routines conform to ISO/IEC 9899:1999 ("ISO C99"), and they implement the Scalb function recommended by IEEE Std 754-1985.

**HISTORY**

The **scalbn()** and **scalbnf()** functions appeared in 4.3BSD and FreeBSD 2.0, respectively. The **scalbln()** and **scalblnf()** functions first appeared in FreeBSD 5.3, and **scalblnl()** and **scalbln()** in FreeBSD 6.0.