

NAME

scalb, **scalbf**, **significand**, **significandf** - IEEE test functions

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

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

double

```
scalb(double x, double n);
```

float

```
scalbf(float x, float n);
```

double

```
significand(double x);
```

float

```
significandf(float x);
```

DESCRIPTION

These functions allow users to test conformance to IEEE Std 754-1985. Their use is not otherwise recommended.

scalb(*x*, *n*) and **scalbf**(*x*, *n*) return $x \cdot (2^{**n})$ computed by exponent manipulation. If *n* is not an integer, +-infinity, or an NaN, the result is unspecified.

significand(*x*) and **significandf**(*x*) return *sig*, where $x := sig \cdot 2^{**n}$ with $1 \leq sig < 2$. **significand**(*x*) and **significandf**(*x*) are not defined when *x* is 0, +-infinity, or NaN.

SEE ALSO

ieee(3), math(3)

STANDARDS

IEEE Std 754-1985