

NAME

sincos, **sincosf**, **sincosl** - sine and cosine functions

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

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

void

```
sincos(double x, double *s, double *c);
```

void

```
sincosf(float x, float *s, float *c);
```

void

```
sincosl(long double x, long double *s, long double *c);
```

DESCRIPTION

The **sincos()**, **sincosf()**, and **sincosl()** functions compute the sine and cosine of x . Using these functions allows argument reduction to occur only once instead of twice with individual invocations of **sin()** and **cos()**. Like **sin()** and **cos()**, a large magnitude argument may yield a result with little or no significance.

RETURN VALUES

Upon returning from **sincos()**, **sincosf()**, and **sincosl()**, the memory pointed to by *s* and *c* are assigned the values of sine and cosine, respectively.

SEE ALSO

cos(3), sin(3)

HISTORY

These functions were added to FreeBSD 11.2 to aid in writing various complex function contained in ISO/IEC 9899:1999 ("ISO C99").