

NAME

fmax, **fmaxf**, **fmaxl**, **fmin**, **fminf**, **fminl** - floating-point maximum and minimum functions

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

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

double

```
fmax(double x, double y);
```

float

```
fmaxf(float x, float y);
```

long double

```
fmaxl(long double x, long double y);
```

double

```
fmin(double x, double y);
```

float

```
fminf(float x, float y);
```

long double

```
fminl(long double x, long double y);
```

DESCRIPTION

The **fmax()**, **fmaxf()**, and **fmaxl()** functions return the larger of *x* and *y*, and likewise, the **fmin()**, **fminf()**, and **fminl()** functions return the smaller of *x* and *y*. They treat +0.0 as being larger than -0.0. If one argument is an NaN, then the other argument is returned. If both arguments are NaNs, then the result is an NaN. These routines do not raise any floating-point exceptions.

SEE ALSO

`fabs(3)`, `fdim(3)`, `math(3)`

STANDARDS

The **fmax()**, **fmaxf()**, **fmaxl()**, **fmin()**, **fminf()**, and **fminl()** functions conform to ISO/IEC 9899:1999 ("ISO C99").

HISTORY

These routines first appeared in FreeBSD 5.3.