

**NAME**

`fmax`, `fmaxf`, `fmaxl` - determine maximum of two floating-point numbers

**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);
```

Link with `-lm`.

Feature Test Macro Requirements for glibc (see [feature\\_test\\_macros\(7\)](#)):

```
fmax(), fmaxf(), fmaxl():
```

```
  _XOPEN_SOURCE >= 600 || _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L;  
  or cc -std=c99
```

**DESCRIPTION**

These functions return the larger value of *x* and *y*.

**RETURN VALUE**

These functions return the maximum of *x* and *y*.

If one argument is a NaN, the other argument is returned.

If both arguments are NaN, a NaN is returned.

**ERRORS**

No errors occur.

**VERSIONS**

These functions first appeared in glibc in version 2.1.

**ATTRIBUTES**

**Multithreading** (see [pthreads\(7\)](#))

The `fmax()`, `fmaxf()`, and `fmaxl()` functions are thread-safe.

**CONFORMING TO**

C99, POSIX.1-2001.

**SEE ALSO**

[fmin\(3\)](#)

**COLOPHON**

This page is part of release 3.74 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <http://www.kernel.org/doc/man-pages/>.