

**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():
    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

**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**

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<code>fmax()</code> , <code>fmaxf()</code> , <code>fmaxl()</code>	Thread safety	MT-Safe

**CONFORMING TO**

C99, POSIX.1-2001, POSIX.1-2008.

**SEE ALSO**

[fdim\(3\)](#), [fmin\(3\)](#)

**COLOPHON**

This page is part of release 4.16 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 <https://www.kernel.org/doc/man-pages/>.