



Linux Ubuntu 26.04 Manual Pages on command 'fdim.3'

\$ man fdim.3

fdim(3) Library Functions Manual fdim(3)

NAME

fdim, fdimf, fdiml - positive difference

LIBRARY

Math library (libm, -lm)

SYNOPSIS

```
#include <math.h>

double fdim(double x, double y);

float fdimf(float x, float y);

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

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

```
fdimf(), fdiml():

    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

DESCRIPTION

These functions return the positive difference, $\max(x-y, 0)$, between their arguments.

RETURN VALUE

On success, these functions return the positive difference.

If x or y is a NaN, a NaN is returned.

If the result overflows, a range error occurs, and the functions return HUGE_VAL, HUGE_VALF, or HUGE_VALL, respectively.

ERRORS

See `math_error(7)` for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Range error: result overflow

errno is set to ERANGE. An overflow floating-point exception (FE_OVERFLOW) is raised.

ATTRIBUTES

For an explanation of the terms used in this section, see `attributes(7)`.

[illegible]

?	Interface	?	Attribute	?	Value	?
---	-----------	---	-----------	---	-------	---

[illegible]

? fdim(), fdimf(), fdiml() ? Thread safety ? MT-Safe ?

[illegible]

STANDARDS

C11, POSIX.1-2008.

HISTORY

glibc 2.1. C99, POSIX.1-2001.

BUGS

Before glibc 2.24 on certain architectures (e.g., x86, but not x86_64) these functions did not set `errno`.

SEE ALSO

fmax(3)

Linux man-pages 6.17

2026-02-08

 $\text{fdim}(3)$