# **NAME**

fdim, fdimf, fdiml - positive difference functions

#### **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);
```

#### DESCRIPTION

The **fdim()**, **fdimf()**, and **fdiml()** functions return the positive difference between x and y. That is, if x-y is positive, then x-y is returned. If either x or y is an NaN, then an NaN is returned. Otherwise, the result is +0.0.

Overflow or underflow may occur if the exact result is not representable in the return type. No other exceptions are raised.

### **SEE ALSO**

```
fabs(3), fmax(3), fmin(3), math(3)
```

## **STANDARDS**

The fdim(), fdimf(), and fdiml() functions conform to ISO/IEC 9899:1999 ("ISO C99").

#### **HISTORY**

These routines first appeared in FreeBSD 5.3.