## NAME

fabs, fabsf, fabsl − absolute value of floating-point number

## LIBRARY

Math library (*libm*, *−lm*)

## SYNOPSIS

```
#include <math.h>

double fabs(double x);
float fabsf(float x);
long double fabsl(long double x);
```

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

**fabsf**(), **fabsl**():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

## DESCRIPTION

These functions return the absolute value of the floating-point number *x*.

## RETURN VALUE

These functions return the absolute value of *x*.

If *x* is a NaN, a NaN is returned.

If *x* is −0, +0 is returned.

If *x* is negative infinity or positive infinity, positive infinity is returned.

## ERRORS

No errors occur.

## ATTRIBUTES

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

| Interface | Attribute | Value |
|---|---|---|
| **fabs**(), **fabsf**(), **fabsl**() | Thread safety | MT-Safe |

## STANDARDS

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

The variant returning *double* also conforms to SVr4, 4.3BSD.

## SEE ALSO

**abs**(3), **cabs**(3), **ceil**(3), **floor**(3), **labs**(3), **rint**(3)