NAME
finite, finitef, finitel, isinf, isinff, isinfl, isnan, isnanf, isnanl − BSD floating-point classification functions

SYNOPSIS
#include <math.h>

int finite(double x**);**
int finitef(float x**);**
int finitel(long double x**);**

int isinf(double x**);**
int isinff(float x**);**
int isinfl(long double x**);**

int isnan(double x**);**
int isnanf(float x**);**
int isnanl(long double x**);**

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

finite(), **finitef**(), **finitel**():
/* Glibc since 2.19: */ _DEFAULT_SOURCE || /* Glibc versions <= 2.19: */ _BSD_SOURCE ||
_SVID_SOURCE
isinf():
_XOPEN_SOURCE >= 600 || _ISOC99_SOURCE || /* Glibc since 2.19: */ _DEFAULT_SOURCE ||
/* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
isinff(), **isinfl**():
/* Glibc since 2.19: */ _DEFAULT_SOURCE || /* Glibc versions <= 2.19: */ _BSD_SOURCE ||
_SVID_SOURCE
isnan():
_XOPEN_SOURCE || _ISOC99_SOURCE || /* Glibc since 2.19: */ _DEFAULT_SOURCE || /* Glibc
versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
isnanf(), **isnanl**():
_XOPEN_SOURCE >= 600 || /* Glibc since 2.19: */ _DEFAULT_SOURCE || /* Glibc versions <=
2.19: */ _BSD_SOURCE || _SVID_SOURCE

DESCRIPTION
The **finite**(), **finitef**(), and **finitel**() functions return a nonzero value if x is neither infinite nor a "not-a-number" (NaN) value, and 0 otherwise.

The **isnan**(), **isnanf**(), and **isnanl**() functions return a nonzero value if x is a NaN value, and 0 otherwise.

The **isinf**(), **isinff**(), and **isinfl**() functions return 1 if x is positive infinity, −1 if x is negative infinity, and 0 otherwise.

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

Interface	Attribute	Value
finite(), **finitef**(), **finitel**(), **isinf**(), **isinff**(), **isinfl**(), **isnan**(), **isnanf**(), **isnanl**()	Thread safety	MT-Safe

NOTES
Note that these functions are obsolete. C99 defines macros **isfinite**(), **isinf**(), and **isnan**() (for all types) replacing them. Further note that the C99 **isinf**() has weaker guarantees on the return value. See fpclassify(3).

SEE ALSO
fpclassify(3)

COLOPHON

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