



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'finite.3'***

**C:\>man finite.3**

FINITE(3)                      Linux Programmer's Manual                      FINITE(3)

### NAME

finite, finitef, finitel, isinf, isinff, isinfl, isnan, isnanf, isnanl - BSD float?

ing-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
```

isinf(), 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(), finitf(), 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(), finitf(), finitel(), ? Thread safety ? MT-Safe ?

?isinf(), isinff(), isinfl(), ?           ?       ?

?isnan(), isnanf(), isnanl() ?           ?       ?

??

## 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).

fpclassify(3)

## COLOPHON

This page is part of release 5.05 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/>.

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