



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'nan.3' command

\$ man nan.3

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

NAME

INFINITY, NAN, HUGE_VAL, HUGE_VALF, HUGE_VALL - floating-point constants

SYNOPSIS

```
#define _ISOC99_SOURCE     /* See feature_test_macros(7) */  
  
#include <math.h>  
  
INFINITY  
  
NAN  
  
HUGE_VAL  
  
HUGE_VALF  
  
HUGE_VALL
```

DESCRIPTION

The macro INFINITY expands to a float constant representing positive infinity.

The macro NAN expands to a float constant representing a quiet NaN (when supported). A quiet NaN is a NaN ("not-a-number") that does not raise exceptions when it is used in arithmetic. The opposite is a signaling NaN. See IEC 60559:1989.

The macros HUGE_VAL, HUGE_VALF, HUGE_VALL expand to constants of types double, float, and long double, respectively, that represent a large positive value, possibly positive infinity.

CONFORMING TO

C99.

On a glibc system, the macro `HUGE_VAL` is always available. Availability of the `NAN` macro can be tested using `#ifdef NAN`, and similarly for `INFINITY`, `HUGE_VALF`, `HUGE_VALL`. They will be defined by `<math.h>` if `_ISOC99_SOURCE` or `_GNU_SOURCE` is defined, or `__STDC_VERSION__` is defined and has a value not less than 199901L.

SEE ALSO

`fpclassify(3)`, `math_error(7)`

COLOPHON

This page is part of release 5.10 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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`INFINITY(3)`