NAME

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

LIBRARY

Math library (*libm*)

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 positi ve 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.

STANDARDS

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)