

**NAME**

log10, log10f, log10l – base-10 logarithmic function

**SYNOPSIS**

```
#include <math.h>
```

```
double log10(double x);
```

```
float log10f(float x);
```

```
long double log10l(long double x);
```

Link with *-lm*.

Feature Test Macro Requirements for glibc (see **feature\_test\_macros(7)**):

**log10f(), log10l():**

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

```
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
```

```
|| /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

**DESCRIPTION**

These functions return the base 10 logarithm of *x*.

**RETURN VALUE**

On success, these functions return the base 10 logarithm of *x*.

For special cases, including where *x* is 0, 1, negative, infinity, or NaN, see **log(3)**.

**ERRORS**

See **math\_error(7)** for information on how to determine whether an error has occurred when calling these functions.

For a discussion of the errors that can occur for these functions, see **log(3)**.

**ATTRIBUTES**

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

Interface	Attribute	Value
log10(), log10f(), log10l()	Thread safety	MT-Safe

**CONFORMING TO**

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

The variant returning *double* also conforms to SVr4, 4.3BSD, C89.

**SEE ALSO**

**cbrt(3)**, **clog10(3)**, **exp10(3)**, **log(3)**, **log2(3)**, **sqrt(3)**

**COLOPHON**

This page is part of release 4.09 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/>.

