

**NAME**

`exp10`, `exp10f`, `exp10l` – base-10 exponential function

**SYNOPSIS**

```
#define _GNU_SOURCE      /* See feature_test_macros(7) */
#include <math.h>
```

```
double exp10(double x);
float exp10f(float x);
long double exp10l(long double x);
```

Link with `-lm`.

**DESCRIPTION**

These functions return the value of 10 raised to the power of  $x$ .

**RETURN VALUE**

On success, these functions return the base-10 exponential value of  $x$ .

For various special cases, including the handling of infinity and NaN, as well as overflows and underflows, see `exp(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 `exp(3)`.

**VERSIONS**

These functions first appeared in glibc in version 2.1.

**ATTRIBUTES**

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

Interface	Attribute	Value
<code>exp10()</code> , <code>exp10f()</code> , <code>exp10l()</code>	Thread safety	MT-Safe

**CONFORMING TO**

These functions are GNU extensions.

**BUGS**

Prior to version 2.19, the glibc implementation of these functions did not set `errno` to `ERANGE` when an underflow error occurred.

**SEE ALSO**

`cbrt(3)`, `exp(3)`, `exp2(3)`, `log10(3)`, `sqrt(3)`

**COLOPHON**

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