#### **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
exp10(), exp10f(), exp10l()	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**

```
\boldsymbol{cbrt}(3),\,\boldsymbol{exp}(3),\,\boldsymbol{exp2}(3),\,\boldsymbol{log10}(3),\,\boldsymbol{sqrt}(3)
```

# **COLOPHON**

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