

**NAME**

gamma - log gamma function

**SYNOPSIS**

```
#include <math.h>
double gamma (x)
double x;
```

**DESCRIPTION**

*Gamma* returns  $\ln |\Gamma(|x|)|$ . The sign of  $\Gamma(|x|)$  is returned in the external integer *signgam*. The following C program fragment might be used to calculate  $\Gamma$ :

```
y = gamma (x);
if (y > 88.0)
    error ();
y = exp (y) * signgam;
```

**DIAGNOSTICS**

A huge value is returned for negative integer arguments.

**BUGS**

There should be a positive indication of error.