

May 12, 1986

NAME

erf, erfc – error functions

SYNOPSIS

#include <math.h>**double erf(x)****double x;****double erfc(x)****double x;**

DESCRIPTION

erf(x) returns the error function of x , where $\text{erf}(x) = \frac{2}{\sqrt{\pi}} \int_0^x e^{-t^2} dt$.

erfc(x) returns $1.0 - \text{erf}(x)$.

The entry for **erfc** is provided because of the extreme loss of relative accuracy if **erf(x)** is called for large x and the result subtracted from 1. (e.g., for $x = 10$, 12 places are lost).

SEE ALSO

math(3M)