ei

ei(x)

The ei function returns the value of the exponential integral *Ei*(*x*):

$$Ei(x) = P\int_{-\infty}^{x} \frac{e^t}{t} dt \qquad (x > 0),$$

where *P* denotes the principal value of the integral.

See Also

The **expInt** function.

References

Abramowitz, M., and I.A. Stegun, *Handbook of Mathematical Functions*, 228 pp., Dover, New York, 1972.

EllipticE

The ellipticE function returns the complete elliptic integral of the second kind,

$$E(k) = \int_0^1 \frac{\sqrt{1-k^2t^2}\,dt}{\sqrt{1-t^2}},$$

with

$$|k| \le 1.$$

See Also

EllipticK, **GeometricMean**, **JacobiCn**, **JacobiSn**

EllipticK

EllipticK(x)

The EllipticK function returns the complete elliptic integral of the first kind,

$$K(k) = \int_0^1 \frac{dt}{\sqrt{\left(1-t^2\right)\left(1-k^2t^2\right)}},$$

with

$$0 \le k \le 1.$$

See Also

EllipticE, **GeometricMean**

End

End

The End keyword marks the end of a macro, user function, or user menu definition.

See Also

The **Function** and **Macro** keywords.