[Approximation 2 of Napier's Constant e]

X Use the approximation formula to find the approximation of reciprocal of the base of the natural logarithm.



[Outline]

Use the following approximation formula to find the approximation of the reciprocal of the base e of the natural logarrithm.

$$\frac{1}{e} = 1 - \frac{1}{1!} + \frac{1}{2!} - \frac{1}{3!} + \frac{1}{4!} - \cdots$$

Let's observe how the approximation of the reciprocal of the base e of the natural logarithm can be obtained as the number of terms increases.

You can see that the convergence speed is very fast.