Properties of e.

(1) e lies between 2.7 and 2.8. i.e., 2.7 < e < 2.8 (since $\frac{1}{n!} \leq \frac{1}{2^{n-1}}$ for $n \geq 2$)

(2) The value of e correct to 10 places of decimals is 2.7182818284

(3) e is an irrational (incommensurable) number

(4) e is the base of natural logarithm (Napier logarithm) i.e. $\ln x = \log_e x$ and $\log_{10} e$ is known as

Napierian constant. $\log_{10} e = 0.43429448$, $\ln x = 2.303 \log_{10} x$

$$\left(\text{since} \quad \ln x = \log_{10} x . \log_e 10 \quad \text{and} \quad \log_e 10 = \frac{1}{\log_{10} e} = 2.30258509 \right)$$