

$$e^{x} =1+\frac{x}{1!}+\frac{x^{2}}{2!}+\frac{x^{3}}{3!}+\frac{x^{4}}{4!}+\frac{x^{5}}{5!}+\frac{x^{6}}{6!}+\frac{x^{7}}{7!}+…$$

$$cosx=1 -\frac{x^{2}}{2!} +\frac{x^{4}}{4!} -\frac{x^{6}}{6!}+…$$

$$sinx= \frac{x}{1!} -\frac{x^{3}}{3!} +\frac{x^{5}}{5!} -\frac{x^{7}}{7!}+…$$



$$（\pm i)^{2}=-1, （\pm i)^{3}=\mp i, （\pm i)^{4}=1…$$

$$e^{ix} =1+\frac{ix}{1!}-\frac{x^{2}}{2!}-\frac{ix^{3}}{3!}-\frac{x^{4}}{4!}-\frac{ix^{5}}{5!}-\frac{x^{6}}{6!}-\frac{ix^{7}}{7!}+…$$

$$cosx=1 -\frac{x^{2}}{2!} +\frac{x^{4}}{4!} -\frac{x^{6}}{6!}+…$$

$$isinx= \frac{x}{1!} -\frac{x^{3}}{3!} +\frac{x^{5}}{5!} -\frac{x^{7}}{7!}+…$$