Základní Maclaurinovy rozvoje

$$\frac{1}{1-x} = \sum_{n=0}^{+\infty} x^n = 1 + x + x^2 + x^3 + \dots, \quad x \in (-1,1),$$

$$(1+x)^p = \sum_{n=0}^{+\infty} \binom{p}{n} x^n = 1 + px + \frac{p(p-1)}{2!}x^2 + \dots, \quad x \in (-1,1), \quad p \in \mathbb{R},$$

$$\mathrm{e}^x = \sum_{n=0}^{+\infty} \frac{x^n}{n!} = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots, \quad x \in \mathbb{R},$$

$$\ln(1+x) = \sum_{n=0}^{+\infty} (-1)^n \frac{x^{n+1}}{n+1} = x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \dots, \quad x \in (-1,1\rangle,$$

$$\sin x = \sum_{n=0}^{+\infty} (-1)^n \frac{x^{2n+1}}{(2n+1)!} = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots, \quad x \in \mathbb{R},$$

$$\cos x = \sum_{n=0}^{+\infty} (-1)^n \frac{x^{2n}}{(2n)!} = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \dots, \quad x \in \mathbb{R},$$

$$\arcsin x = \sum_{n=0}^{+\infty} \frac{[(2n-1)!!]^2 x^{2n+1}}{(2n+1)!} = x + \frac{x^3}{6} + \frac{3x^5}{40} + \frac{5x^7}{112} + \dots, \quad x \in \langle -1,1\rangle,$$

$$\operatorname{arctg} x = \sum_{n=0}^{+\infty} (-1)^n \frac{x^{2n+1}}{2n+1} = x - \frac{x^3}{3} + \frac{x^5}{5} - \frac{x^7}{7} + \dots, \quad x \in \langle -1,1\rangle,$$

$$\sinh x = \sum_{n=0}^{+\infty} \frac{x^{2n+1}}{(2n+1)!} = x + \frac{x^3}{3!} + \frac{x^5}{5!} + \frac{x^7}{7!} + \dots, \quad x \in \mathbb{R},$$

$$\cosh x = \sum_{n=0}^{+\infty} \frac{x^{2n}}{(2n)!} = 1 + \frac{x^2}{2!} + \frac{x^4}{4!} + \frac{x^6}{6!} + \dots, \quad x \in \mathbb{R},$$

$$\operatorname{argsinh} x = \sum_{n=0}^{+\infty} (-1)^n \frac{[(2n-1)!!]^2 x^{2n+1}}{(2n+1)!} = x - \frac{x^3}{6} + \frac{3x^5}{40} - \frac{5x^7}{112} + \dots, \quad x \in \langle -1,1\rangle,$$

$$\operatorname{argtgh} x = \sum_{n=0}^{+\infty} \frac{x^{2n+1}}{2n+1} = x + \frac{x^3}{3} + \frac{x^5}{5} + \frac{x^7}{7} + \dots, \quad x \in (-1,1).$$