

$$\sum a_n$$

1) NP

2) $\sum |a_n| \rightarrow$ LSK
SS

$\lambda \Rightarrow \sum a_n$

$\searrow \int \frac{a_{n+1}}{a_n}$

3) $\sum a_n \rightarrow$ Leibniz
AD

$$\sum_{n \rightarrow \infty} \frac{\sin(n)}{n}$$

Diničlet

$$\sum \frac{\sin \frac{1}{n}}{n} \quad \sin v > 0$$

$$\text{LSS } b_n = \frac{\frac{1}{n}}{n} = \frac{1}{n^2}$$

$$\lim_{n \rightarrow \infty} \sqrt[n]{n} = 1$$

$$\sqrt[n]{n} \leq \sqrt[n]{n+1} \leq \sqrt[n]{2n} = \sqrt[n]{2} \cdot \sqrt[n]{n}$$

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$\lim_{n \rightarrow \infty} \frac{\sin \frac{1}{n}}{\frac{1}{n}} = \lim_{n \rightarrow \infty} \frac{\sin x}{x} = 1$

$$\lim_{x \rightarrow 0} \frac{\sin x}{x}$$

$$\sum_n \frac{\arctan \sqrt{n}}{\sin(2n+1)}$$

$$\sum \cos(1) + \sum$$

$$\cos 1 \sum \sin(2n) \frac{\arctan \sqrt{n}}{n}$$

$\rightarrow 0$ monof. ?

$$\cos 1 \sum \frac{\sin(2n)}{n} \cdot \arctan \sqrt{n}$$