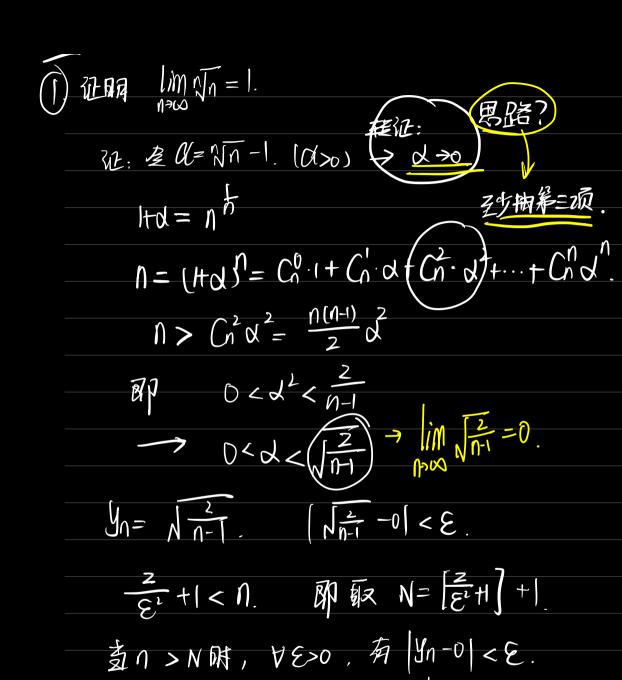
(一) 天道友理。

(1) $A \in \mathbb{N}$ $A = \lim_{n \to \infty} A = A$.

数列的段限



 $\lim_{n\to\infty} y_n = 0. \qquad \text{im } 0=0.$

MG =

$$\lim_{n\to\infty} \sqrt{n} = \lim_{n\to\infty} \sqrt{n} = 1$$

$$\lim_{n\to\infty}\frac{n}{n^n}=0$$

$$Q = (Hb)^n > \frac{n(n-1)}{2} - b^2.$$

$$0 < \frac{n}{\alpha^n} < \frac{n}{\frac{n(n-1)}{2} \cdot b^1} = \left(\frac{z}{b^2(n-1)}\right)$$

 $Z_{N} \rightarrow 0 (N \rightarrow \infty)$

$$2 = \sqrt[n]{2^n} < \sqrt[n]{m+2^n} < \sqrt[n]{2^n+2^n} = 2 \times \sqrt[n]{2} \leq Z_n$$

 $\lim_{n\to\infty} \sqrt{|n|} = 2.$

LAMP: 没有非空数梁 E, 若FER, 且 L最小的上界)

(2) VE>O, 且XOEE, 有B-E<XO.[X多-盖都宏超B).

幻里:有上界的非空数集,从有上分解界,且上海界值一.

当n>N时,有 $\beta-\varepsilon<\chi_N\leq\chi_{\Omega}$ $\Rightarrow 0\leq\beta-\chi_{\Omega}<\varepsilon$.

 $\lim_{n\to\infty} \pi_n = \beta = \sup\{x_n\}.$

一单调解性则:单调有界的数3/23有数32 [M]单调 >有上界

月冷数别收敛.

$$An = 1 + C_{1} \cdot \frac{1}{n} + C_{1} \cdot \frac{1}{n} + \cdots + C_{n} \cdot \frac{1}{n^{n}}.$$

$$= [+ 1 + \frac{1}{2!} (1 - \frac{1}{n}) + \frac{1}{3!} \frac{(n+1)(n-1)}{n \cdot n} + \cdots + \frac{1}{n!} (n-1)(1-\frac{2}{n}) - (1-\frac{n-1}{n})$$

$$= [+ \frac{1}{n+1} + \frac{1}{n!} \frac{(n+1)(1-\frac{2}{n})}{(n+1)!} + \cdots + \frac{1}{n!} (1-\frac{n-1}{n+1}) + \frac{1}{(n+1)!} \frac{(1-\frac{n}{n+1}) \cdot (1-\frac{n}{n+1})}{(1-\frac{n}{n+1}) \cdot (1-\frac{n}{n+1})}$$

$$\sqrt{2n} < \sqrt{2n+1}$$
 $\sqrt{2n} < \sqrt{2n+1}$
 $\sqrt{2n} < \sqrt{2n+1}$

放加率值,因有上界 > 加有极限 => Th 收敛. lim(Hn) = e.





