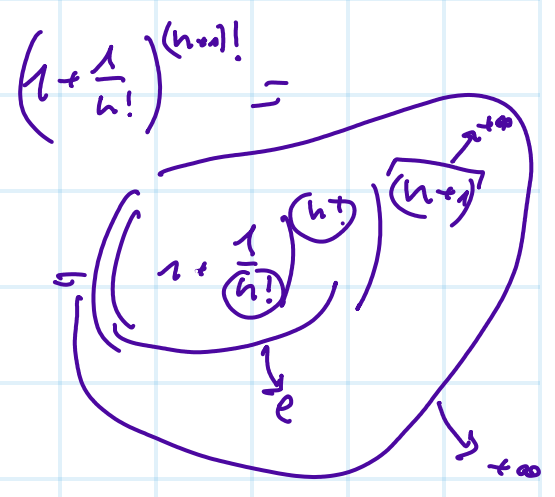


2.3

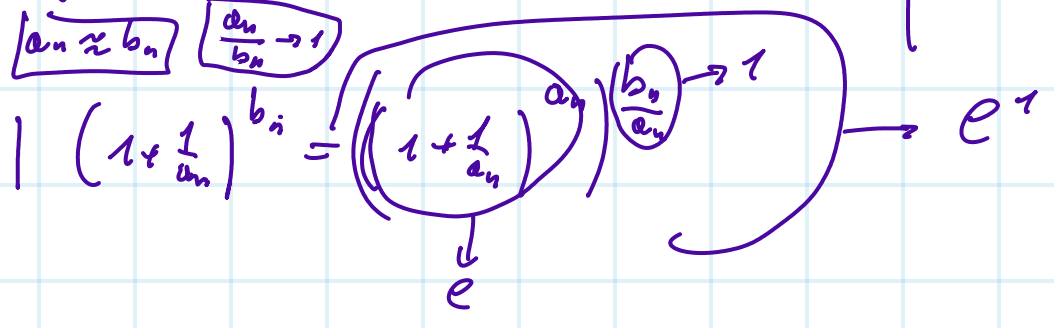
$$\left(1 + \frac{1}{a_n}\right)^{a_{n+1}} \rightarrow e? \quad \boxed{F}$$

con $a_n \rightarrow +\infty$



$$\left(1 + \frac{1}{a_n}\right)^{a_n} \rightarrow e \quad \boxed{S}$$

$a_n \approx b_n$ $\frac{a_n}{b_n} \rightarrow 1$



$a_n = n!$
 $a_{n+1} = (n+1)!$

$$\frac{a_{n+1}}{a_n} = \frac{(n+1)!}{n!} = n+1 \rightarrow +\infty$$

$a_n \approx b_n$

$a_n \rightarrow +\infty$
 $b_n \rightarrow +\infty$

$\frac{a_n}{b_n} \rightarrow 1$



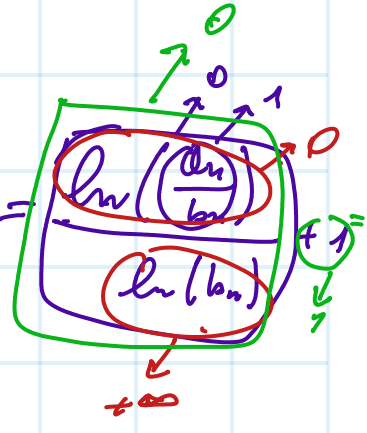
$f(a_n) \approx f(b_n)$

$f = \log$ [S]
 $f = e^{\text{something}}$

$\frac{\ln(a_n)}{\ln(b_n)}$

$$= \frac{\ln\left(\frac{a_n}{b_n} \cdot b_n\right)}{\ln(b_n)} = \frac{\ln\left(\frac{a_n}{b_n}\right) + \ln(b_n)}{\ln(b_n)}$$

$$= \frac{\ln\left(\frac{a_n}{b_n}\right) + \ln(b_n)}{\ln(b_n)}$$



$\frac{e^{a_n}}{e^{b_n}}$

$a_n = n^2$
 $b_n = \ln^2$

$$\frac{n^2 + n}{n^2} = 1 + \frac{1}{n} \rightarrow 1$$

$$\frac{\ln^{n+1} + \ln n}{\ln^2}$$