

5.1d

viernes, 29 de abril de 2022

8:08

Demstrar la no-regularidad de $\{a^{2^n}b^n \mid n \in \mathbb{N}\}$

$$|w| \geq N$$

$$w = xyz$$

$$\left| \begin{array}{l} x = a^j \\ y = a^k \\ z = a^{2n-j-k} \end{array} \right.$$

$$j+k \leq N$$

$$k \geq 1$$

$$\boxed{i=2} \rightarrow$$

$$w = a^j a^{2k} a^{2n-j-k} b^n = a^{2n+k} b^n \notin L$$