

Exercice 7705 (Martini)

$$n = \sum_{a=0}^{c_m} 10^a x_a$$

$$C_n = \left\lfloor \frac{\ln n}{\ln 10} + 1 \right\rfloor$$

$$C_n \sim \frac{\ln n}{\ln 10} + 1$$

$$\frac{C_{n+1}}{C_n} = \frac{\left\lfloor \frac{\ln n}{\ln 10} + \frac{\ln(1+\frac{1}{n}) + 1}{\ln 10} \right\rfloor}{\left\lfloor \frac{\ln n}{\ln 10} + 1 \right\rfloor}$$

$$\sim \frac{\frac{\ln n}{\ln 10} + 1}{\frac{\ln n}{\ln 10} + 1} \rightarrow 1$$

$$\underline{RCV = 1}$$