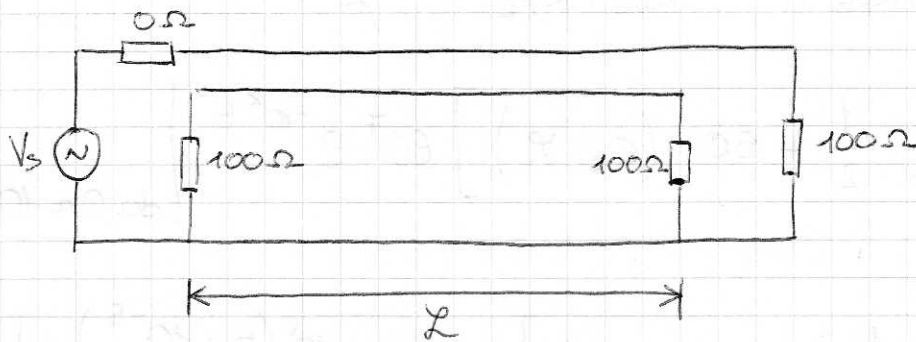


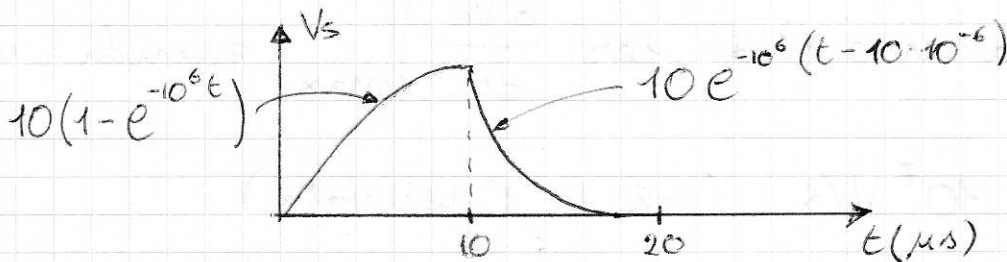
Crosstalk - ES4

Due circuiti accoppiati hanno le caratteristiche riportate in figura.

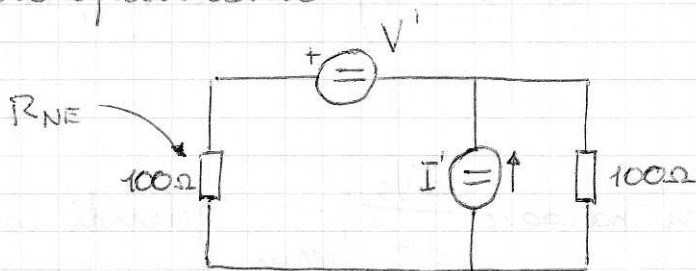


$$\begin{aligned} L &= 1 \text{ m} \\ C_{12} &= 25 \frac{\text{pF}}{\text{m}} \\ L_{12} &= 1 \frac{\mu\text{H}}{\text{m}} \end{aligned}$$

Determinare l'andamento temporale della tensione di Near End e il valore massimo e quello minimo di V_{NE} conoscendo l'andamento di $V_s(t)$.



Circuito equivalente:



$$V' = (L_{12} \cdot L) \cdot \frac{1}{R_L} \frac{d}{dt} V_s(t)$$

$$I' = (C_{12} \cdot L) \cdot \frac{d}{dt} V_s(t)$$

$$\frac{dV_{s1}}{dt} = \frac{d}{dt} (10 - 10e^{-10^6 t}) = 10^7 e^{-10^6 t}$$

