

Éléments de correction

Partie A

A1 $R_{12} = 10k\Omega - 3,5k\Omega = 6,5k\Omega$

$R_{13} = 10k\Omega$

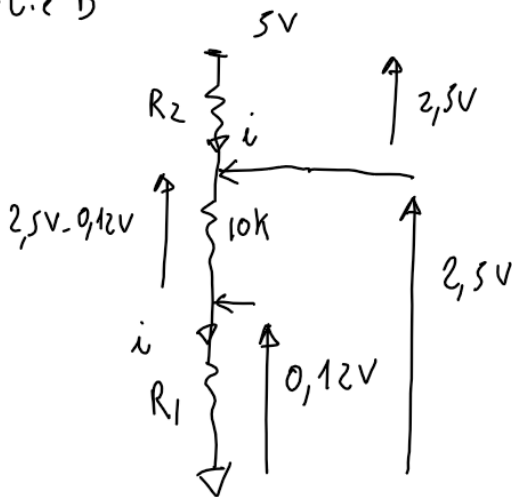
A2 $V_{Rmin} = 0$ $V_{Rmax} = \frac{10k}{10k + 20k} \times 3V = 1V$

A3 Div → GND donc $N=1$

$f_{oscmax} = 10MHz \times \left(\frac{10k}{33k} \right) = 3,03MHz$

$f_{oscmin} = 10MHz \times \left(\frac{10k}{43k} \right) = 2,33MHz$

Partie B



$i = \frac{2,5V - 0,12V}{10k} = 238\mu A$

$R_1 = \frac{0,12V}{i} = 504\Omega$

$R_2 = \frac{2,5V}{i} = 10,5k\Omega$