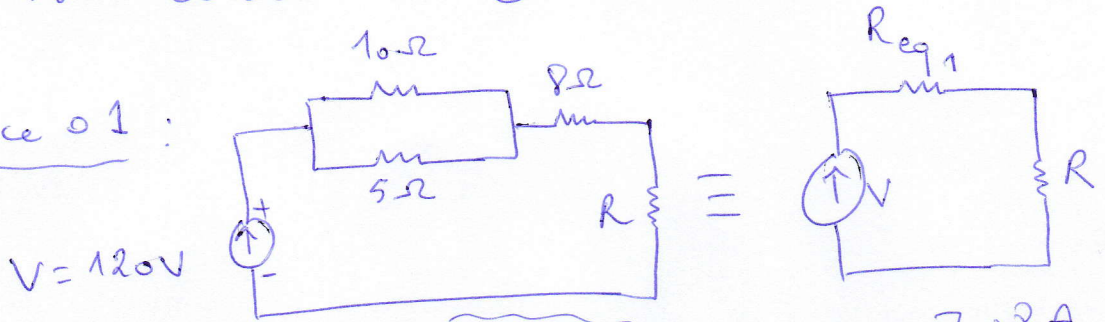


- Carrige' type de l'EMD  
" Electronique des Composants "

Questions de cours :

Voir cours et (1) :  $R = (5280 \pm 264) \Omega$

\* Exercice 01 :



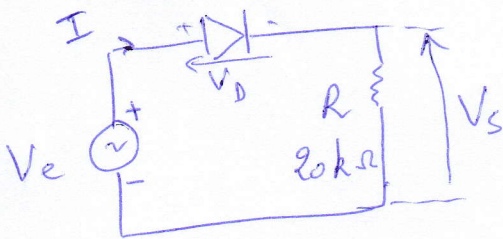
$$P = R_{eq} \cdot I^2 = V \cdot I \Rightarrow \left\{ I = \frac{P}{V} \right\} \quad \text{A.N : } I = 7,08 \text{ A.}$$

$$V = (R_{eq_1} + R) I \Rightarrow R_{eq_1} + R = \frac{V}{I} \Rightarrow \left\{ R = \frac{V}{I} - R_{eq_1} \right\}$$

$$R_{eq_1} = (10 \parallel 5) + 8 = \frac{10 \times 5}{10 + 5} + 8 = 11,33 \Omega$$

$$\Rightarrow \frac{V}{I} = \frac{120}{7,08} \approx 17 = 11,33 + R \Rightarrow R = 17 - 11,33 \Rightarrow \boxed{R \approx 5,6 \Omega}$$

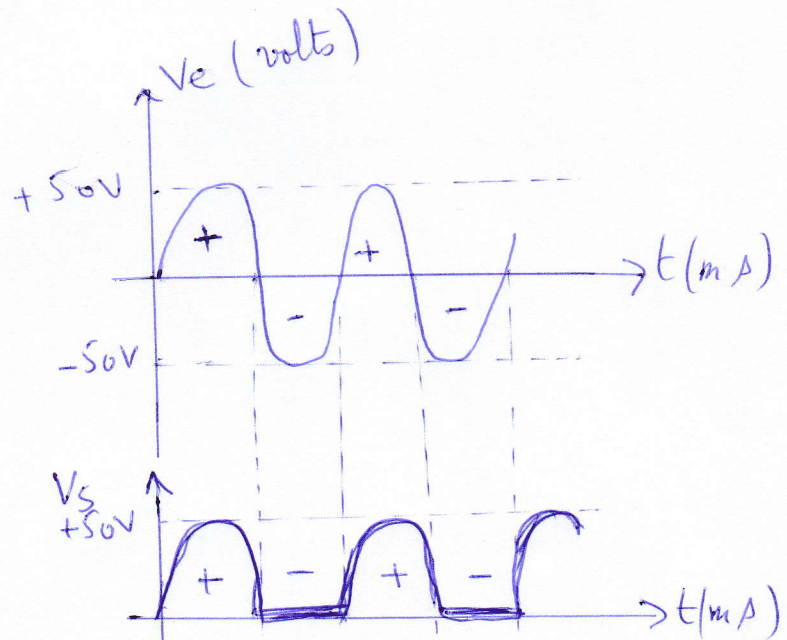
\* Exercice 02 :



Diode idéale  $\Rightarrow V_D = 0V$ .

$$V_e = V_D + R I \Rightarrow V_e = R I$$

$$\Rightarrow \boxed{I = \frac{V_e}{R}} \Rightarrow I = 2,5 \text{ mA}$$



\* Alternance Positive : Diode passant (conduit)  $\Rightarrow V_s = R \cdot I = V_e = 50V$

\* Alternance négative : Diode bloquée  $\Rightarrow I = 0$   
 et  $V_s = R \cdot I = 0V$ .

