

iii) $R = 10 \Omega$ $E = -50V$

o circuito vai estar sempre em condução, pois tem sempre corrente a circular no circuito, como $\frac{\pi}{2}$ é centro a média é nula.

$$V_{0, \text{méd}} = \frac{1}{2\pi} \int_0^{2\pi} A \sin(\theta) d\theta$$

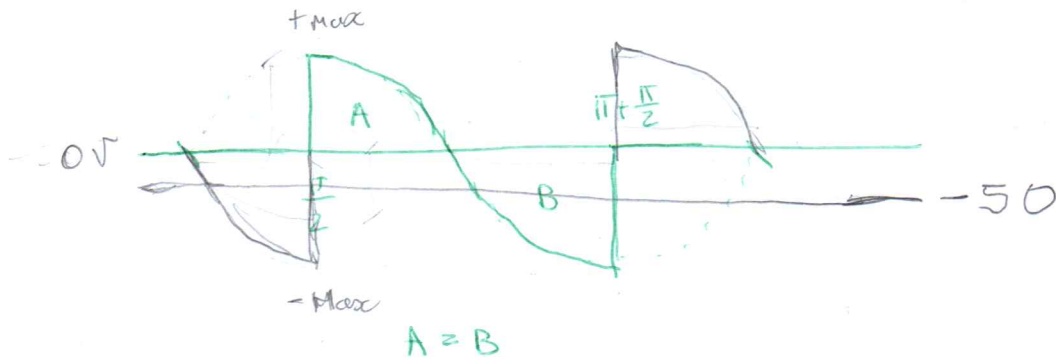
$$= 0 \text{ [V]}$$

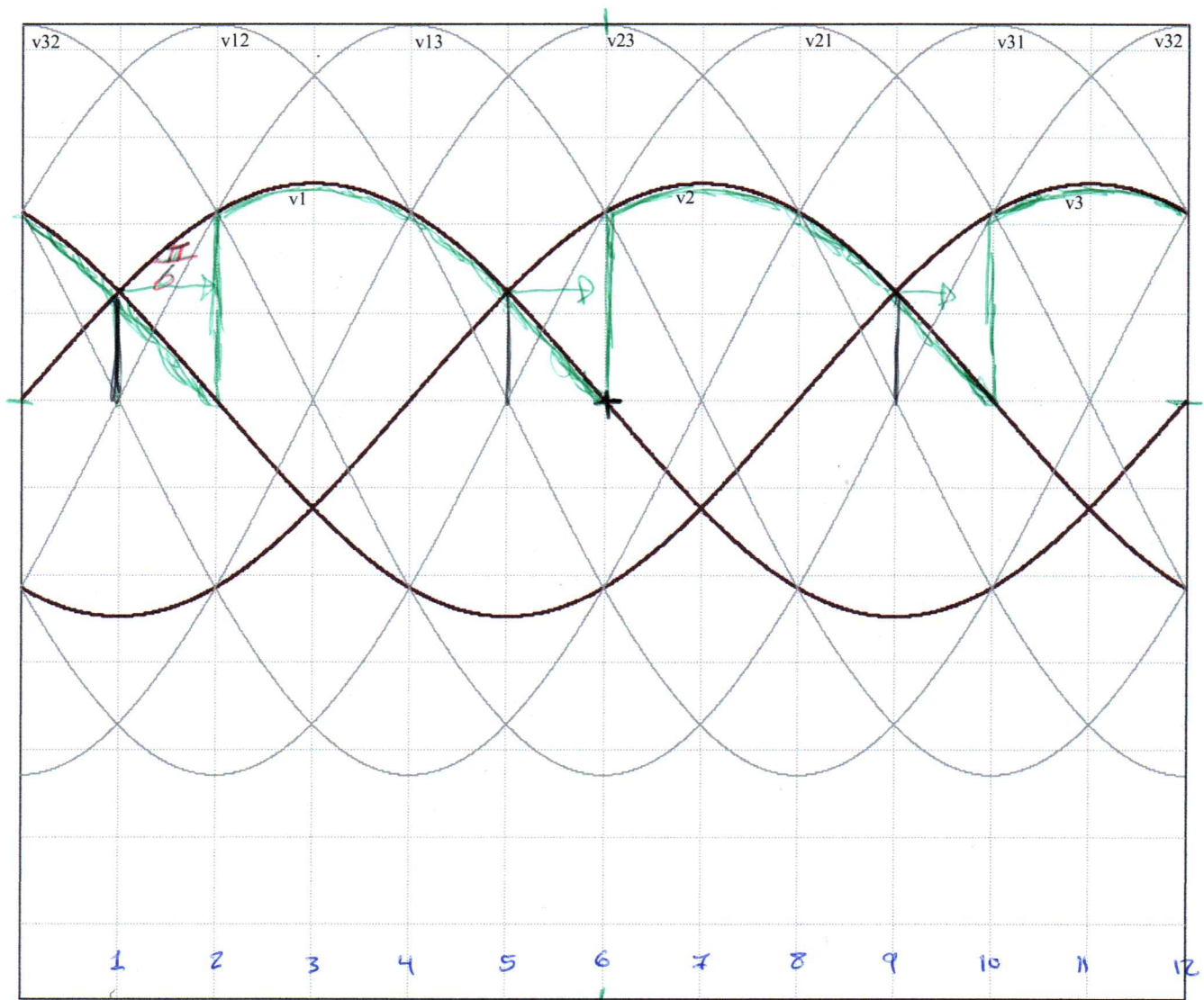
$$P = 0$$

$$I_{0, \text{méd}} = \frac{1}{\pi} \int_{\frac{\pi}{2}}^{\pi + \frac{\pi}{2}} \frac{A \sin(\theta) + 50}{10} d\theta$$

$$\alpha_{-50V} = -0,15433 \text{ rad}$$

$$\approx 8,8^\circ$$





i)

$$230 \times \frac{230}{\sqrt{3}} = 2329$$

$$3 \times \frac{230}{\sqrt{3}} \times \frac{230}{\sqrt{3}} = 927,81$$

$$I_{rms} = \frac{230}{\sqrt{3}} = 132,79$$

$$V_{med} = 3 \times \frac{1}{2\pi} \int_{\frac{\pi}{3}}^{\pi} A \cdot \sin(\theta) d\theta; A = \sqrt{2} \cdot 230$$

$$= 232,9568 \text{ [V]}$$

$$I_o = 3 \times \frac{1}{2\pi} \int_{\frac{\pi}{3}}^{\pi} \frac{A \cdot \sin(\theta)}{100} d\theta = 2,329 \text{ [A]}$$

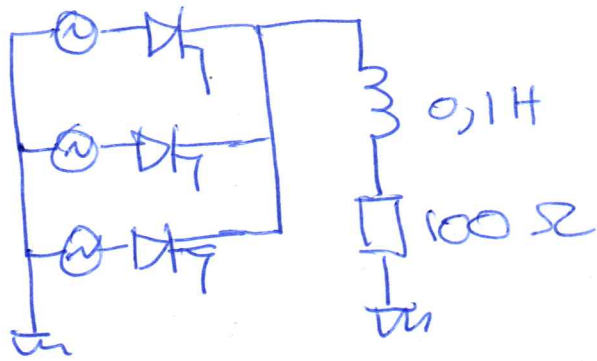
$$P = 3 \times \frac{1}{2\pi} \int_{\frac{\pi}{3}}^{\pi} A \cdot \sin(\theta) \cdot I_o d\theta$$

$$= 3 \times I_o \times \frac{1}{2\pi} \times \int_{\frac{\pi}{3}}^{\pi} A \cdot \sin(\theta) d\theta$$

$$= 542,5564 \text{ [W]}$$

$$FP = \frac{542,5564}{927,81} = 0,5847$$

CACC UZEZ ii



$$Z \approx 104,82 \angle 17,4^\circ$$

~~$\approx 0,304 \text{ rad}$~~

$$\alpha = \frac{\pi}{3}$$

$$\alpha_T = \frac{\pi}{6} + \frac{\pi \cdot 2}{6}$$

$$= \frac{3\pi}{6}$$

$$V_{oméd} = 148,2804 \text{ [V]}$$

$$I_{1 \text{ fase } méd} = 0,49426 \text{ [A]}$$

$$I_{oméd} = 3 \times I_{1 \text{ fase } méd}$$

$$= 1,48278 \text{ [A]}$$

$$P_{oméd} = 299,416 \text{ [W]}$$

$$S = ?$$

$$FP = \frac{P}{S} \rightarrow ?$$

$$\alpha_T = \frac{3\pi}{6}$$

off \rightarrow

$$\gamma = 1.8727$$

trigger.

$$V_{omédio} = \frac{V_{omédio}}{\cos \alpha}$$

$$= 296,5608 \text{ [V]}$$