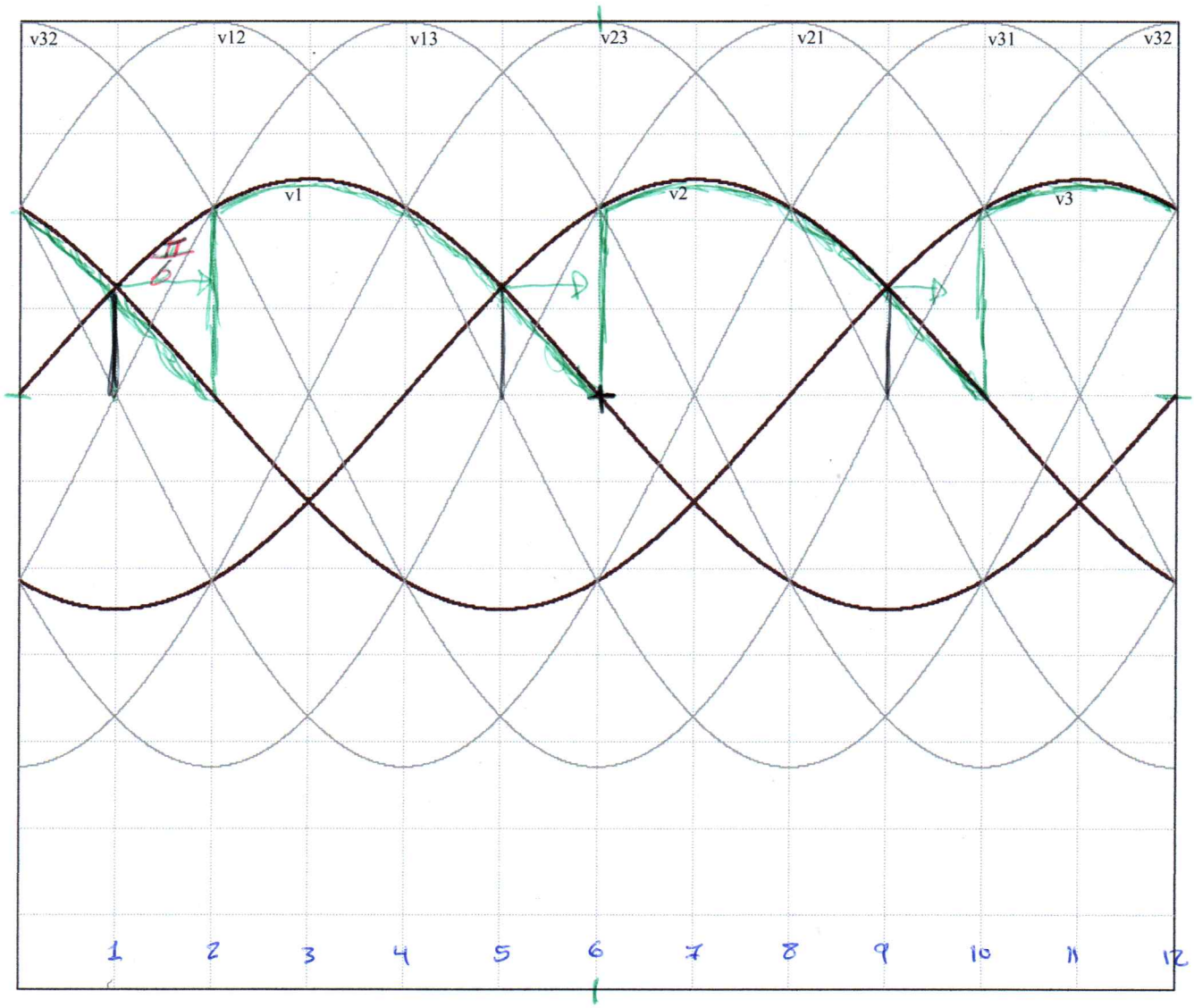
CACCV2E2

Nome: Sergio Santos Número: 1020881



i)

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

$= 232,9568$ [V]

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

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

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

$= 542,5564$ [W]

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

$= 0,5847$