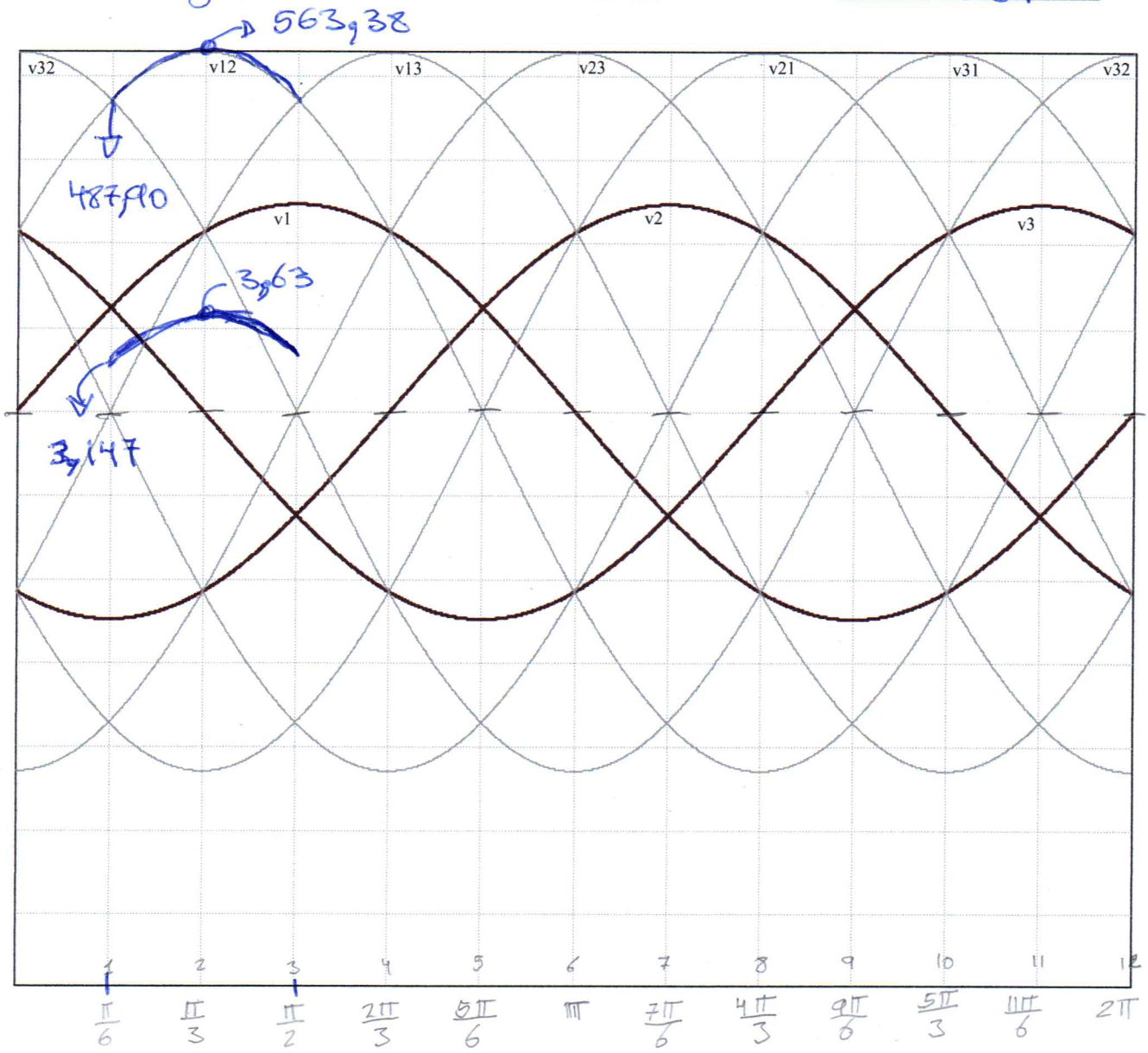
CA/CC

(7)

Nome: Sergio Santos Número: 1020884



exc 4 PD3

$V_{o\,med} = 6 \times \frac{1}{2\pi} \times \int_{\frac{\pi}{6}}^{\frac{\pi}{2}} \sqrt{3}.\sqrt{2}.230.\sin(\theta+\frac{\pi}{6})\,d\theta \simeq 537,99$ ✓

$V_{o\,rms} = \sqrt{6 \times \frac{1}{2\pi} \times \int_{\frac{\pi}{6}}^{\frac{\pi}{2}} (\sqrt{3}.\sqrt{2}\,230.\sin(\theta+\frac{\pi}{6}))^2 d\theta} = 538,464$ ✓

$i_{o\,med} = \frac{537,99-200}{100} = 3,3799$ ✓

$i_{o\,rms} = \frac{538,35-200}{100} = 3,3835$ ✓

$P = R I_{ef}^2$

$P = 6 \times \frac{1}{2\pi} \int_{\frac{\pi}{6}}^{\frac{\pi}{2}} \sqrt{3}.\sqrt{2}.230.\sin(\theta+\frac{\pi}{6}) \times \frac{\sqrt{3}.\sqrt{2}.230-200}{100} \sin(\theta+\frac{\pi}{6})$

$= 1870,14$ ✗