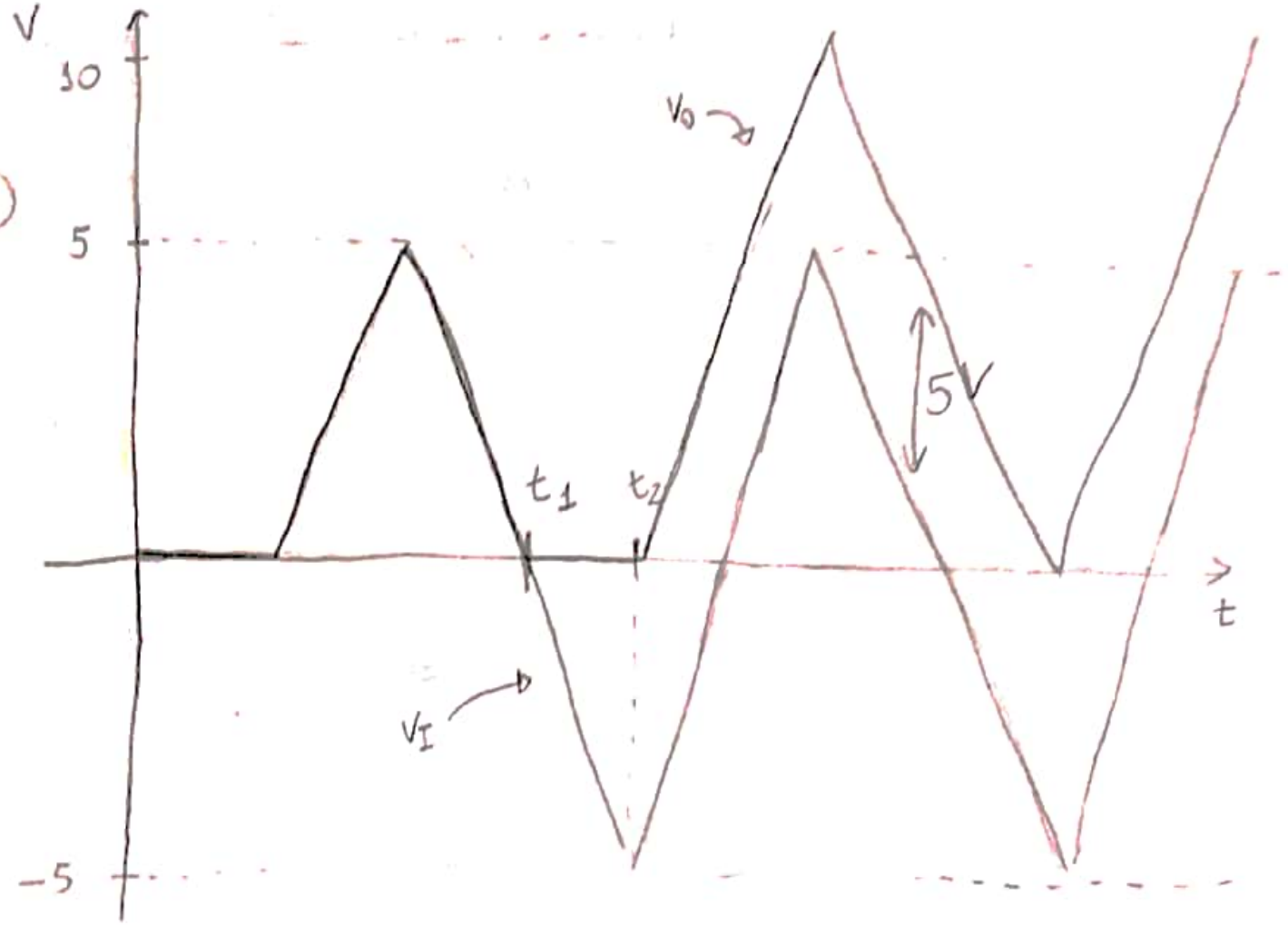
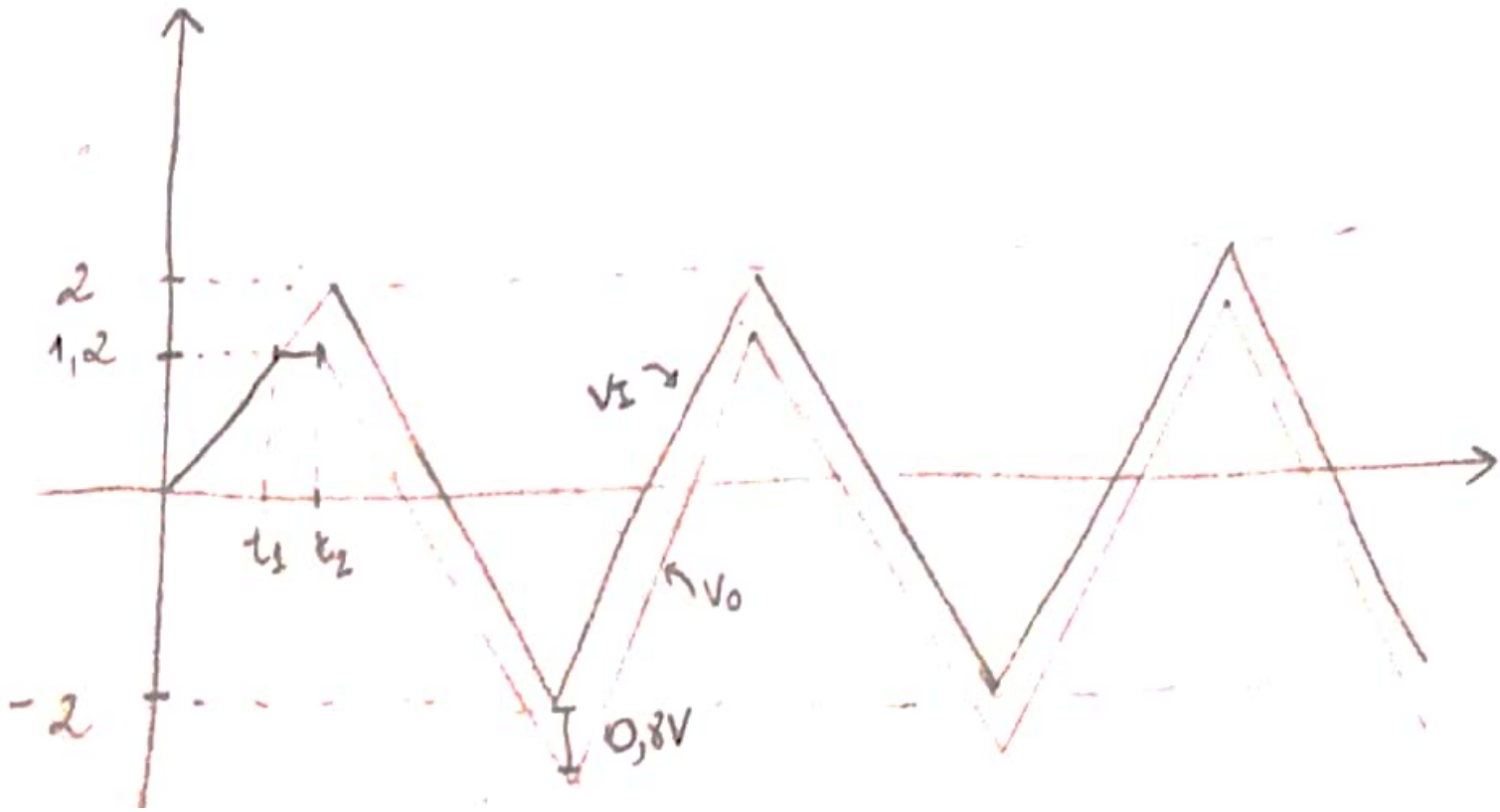
RODRIGO ALVES DE ALMEIDA

3.1

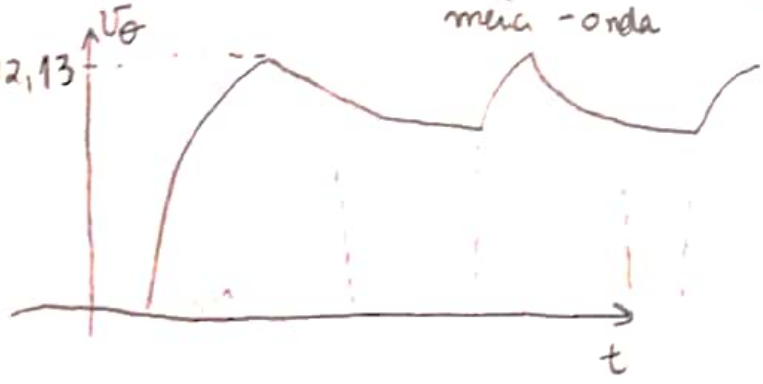




3 2) $C_{min} = \frac{I_{bar}\,\Delta t}{\Delta V_L}$

$C_{min} = \frac{10^{-7} \cdot 10^{-3}}{10^{-3}} = 100\ pF$

3 3) 1) 12,13 V_θ meia-onda



$V_r \approx \frac{12,13}{60 \cdot 10^3 \cdot 10^{-4}} \approx 2,02$

$V_{\theta DC} = 12,13 - 1,01 = 11,1\,V$

$\tilde{V}_\theta = \frac{1,01}{\sqrt{3}} = 0,58\,V$

$r\% = 5,2\,\%$

2) 25 12,13 onda completa

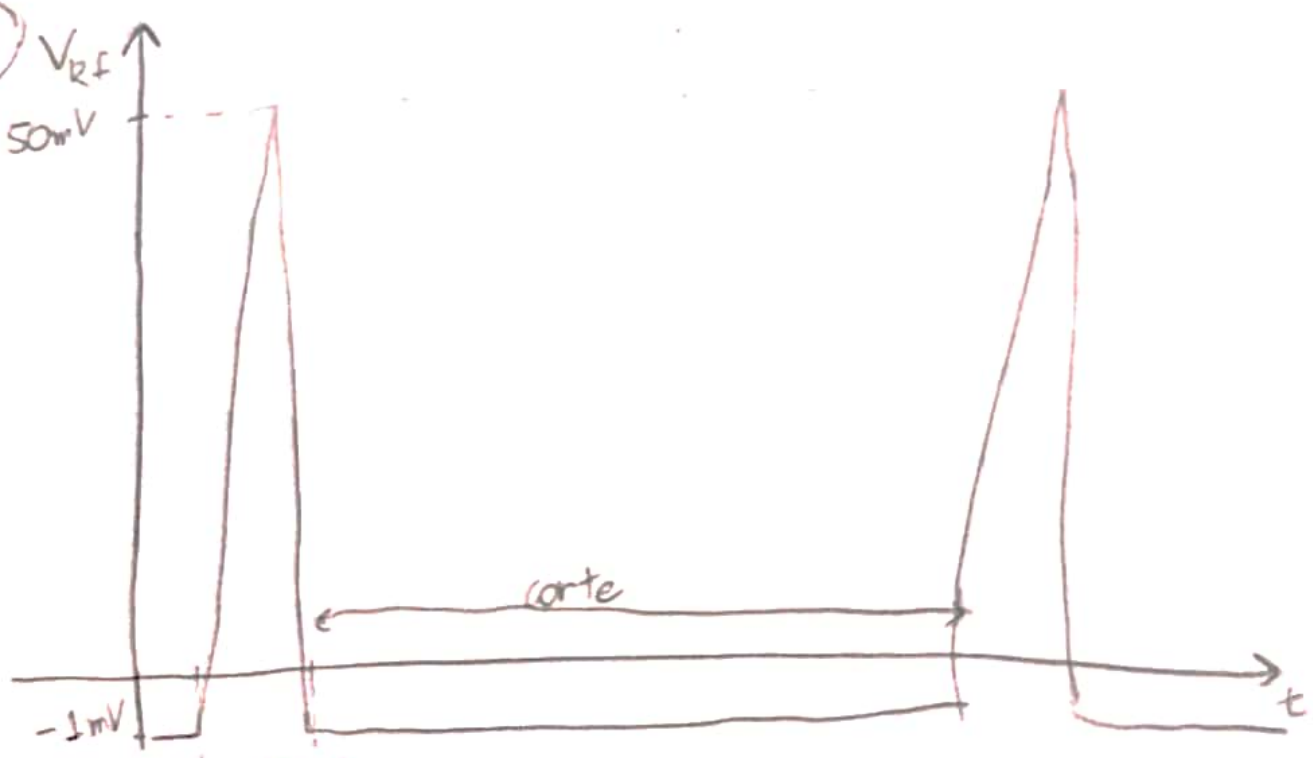
$V_r \approx \frac{12,13}{2 \cdot 60 \cdot 10^3 \cdot 10^{-4}} \approx 1,01$

$V_{\theta DC} = 12,13 - 0,51 = 11,62\,V$

$\tilde{V}_\theta = \frac{0,51}{\sqrt{3}} = 0,29\,V$

$r\% = 2,5\,\%$

34)



$$I_L = \frac{10^{-3}}{0,1} = 10\,mA$$

$$I_{D\,máx} = \frac{50 \cdot 10^{-3}}{0,1} + 10mA = 510\,mA$$

	V_p medido	V_r calculado	V_r medido
½ onda	14,25 V	2,02 V	2,31 V
onda completa	14,90 V	1,01 V	1,15 V

4.2) Se o diodo fosse ideal, o offset entre as curvas seria de 2 V, que é a tensão de pico