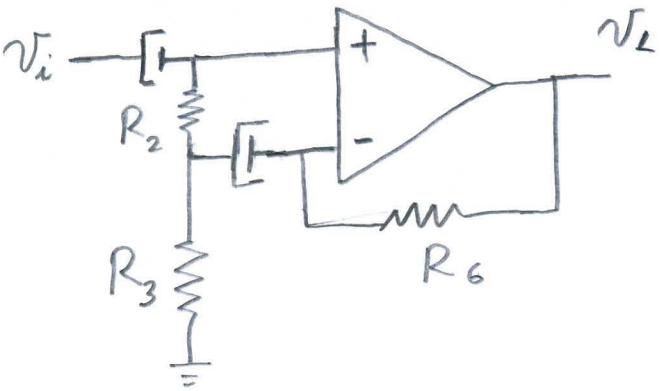
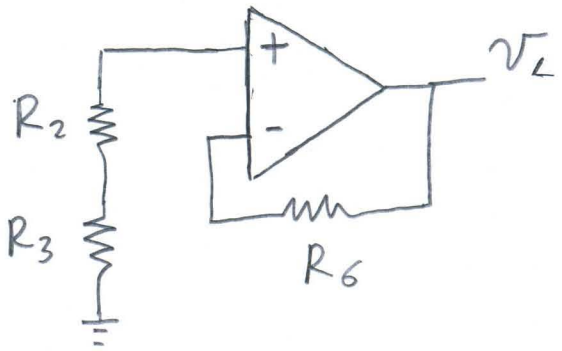
a) DIAGRAMA EN BLOQUES SIMPLIFICADO



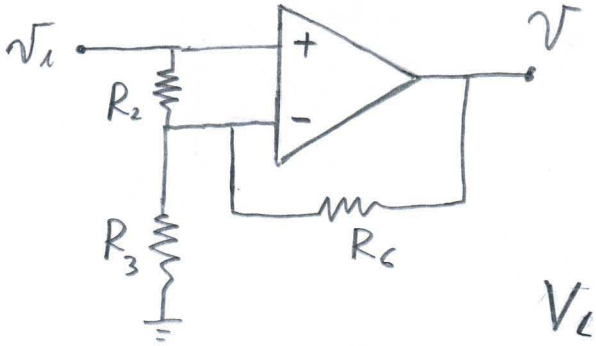
EN POLARIZACION:



DEBE SER

$R_2 + R_3 = R_6 \Rightarrow [R_2 = 17k$

b) EN SEÑAL:



$$A_v = 1 + \frac{R_6}{R_3}$$

$$V_{LEF.} = \left(1 + \frac{R_6}{R_3}\right) V_{iEF.} = \left(1 + \frac{18k}{1k}\right) 1V$$

$$\left[V_{LEF.} = 19V \right]$$

$$\hat{V}_L = \sqrt{2}\, V_{Lef} = \sqrt{2}\; 19V = 26{,}9\,V \cong 27\,V$$

MAXIMA POTENCIA A LA SALIDA:

$$\left[P_{L_{MAX}} = \frac{(V_{LefM})^2}{R_L} = \frac{(19\,V)^2}{8\,\Omega} = 45\,W \right]$$

c) $\hat{V}_{L_M} = 27\,V$ $\qquad \hat{I}_L = \dfrac{\hat{V}_L}{R_L} = \dfrac{27\,V}{8\,\Omega} = 3{,}37\,A$

VERIFICACION DEL FUNCIONAMIENTO $Q_{7/8}$

$$V_F = \hat{V}_{L_M} + \hat{I}_{L_M} R_{15} + V_{CE}$$