Ayudantía 8

1. Determine $A_v = \frac{V_s}{V_e}$. Considere como datos $R_{b1}, R_{b2}, R_c, R_e, h_{fe}, h_{ie}$

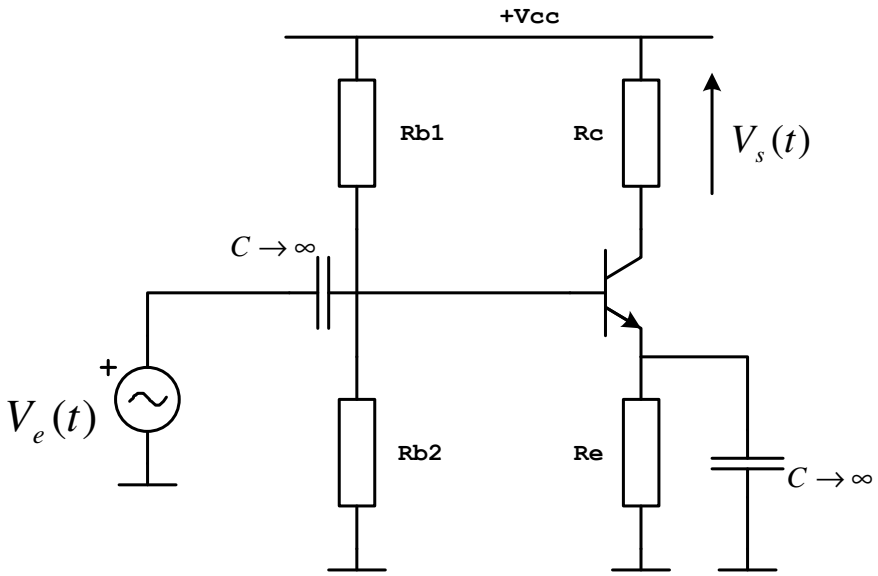

Figura 1

Solución:

$$\boxed{A_v = -\frac{h_{fe} \cdot R_c}{h_{ie}}}$$

2. Determine la impedancia de salida del circuito de la figura 1. Considere como datos $R_{b1}, R_{b2}, R_c, R_e, h_{fe}, h_{ie}$

Solución:

$$\boxed{Z_o = R_c}$$

3. Determine Vs(t). Considere $V_{be} = 0.7$, $h_{fe} = 100$, $h_{ie} = 1k$, $V_e(t) = 0.001 \cdot sen(\omega t)$

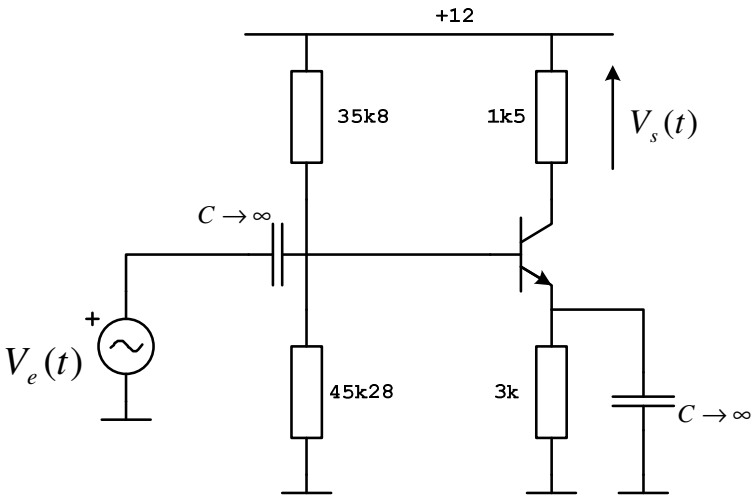

Figura 2

Solución:

$$\boxed{V_s(t) = 3 - 0.15 \cdot sen(\omega t)}$$

4. Determine $A_v = \frac{V_s}{V_e}$. Considere como datos $R_b, R_c, R_e, h_{fe}, h_{ie}$

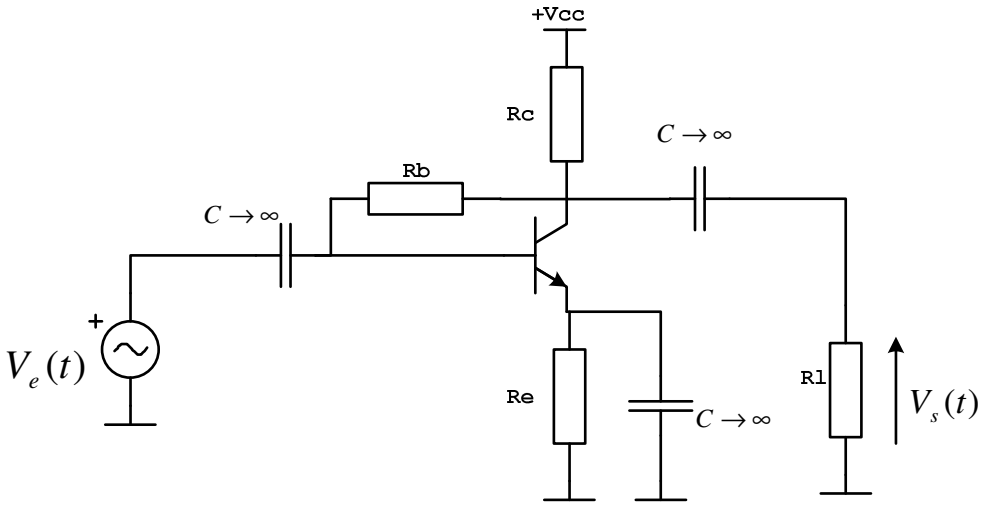

Figura 3

Solución:

$$\boxed{A_v = \frac{V_s}{V_e} = \left(\frac{1}{R_b} - \frac{h_{fe}}{h_{ie}}\right) \cdot \left[\frac{1}{R_c // R_L} + \frac{1}{R_b}\right]^{-1}}$$