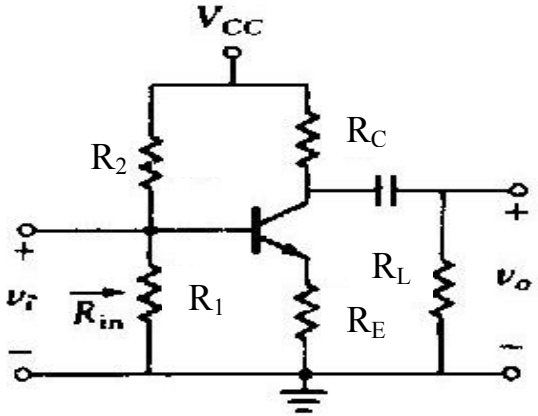
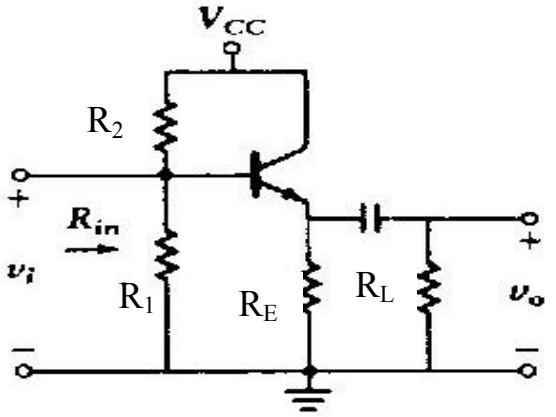
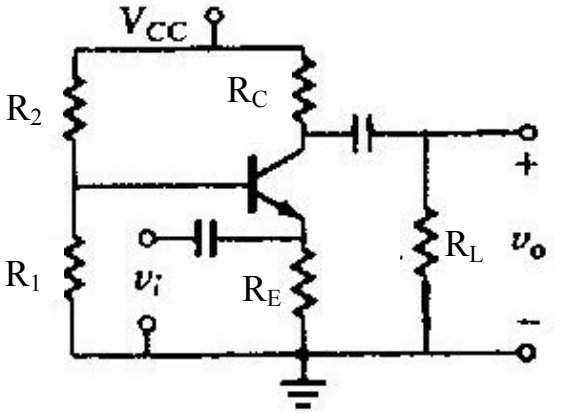
Type		Voltage Gain (A_v)	Voltage Gain (A_i)	Input Resistance (R_{in})
Common emitter		Long forms: $\frac{-(R_L \Vert R_C)}{h_{ib} + R_E}$	$\frac{-R_B}{\frac{R_B}{\beta} + h_{ib} + R_E} \frac{R_C}{R_L + R_C}$	$\frac{R_B(h_{ib} + R_E)}{\frac{R_B}{\beta} + h_{ib} + R_E}$
		Short forms, if $h_{ib} \ll R_E$ and $R_B \ll \beta R_E$: $\frac{-R_L \Vert R_C}{R_E}$	$\frac{-R_B}{R_E} \frac{R_C}{R_C + R_L}$	R_B
Common collector (Emitter follower)		Long forms: $\frac{R_E \Vert R_L}{h_{ib} + (R_E \Vert R_L)}$	$\frac{R_B}{\frac{R_B}{\beta} + h_{ib} + (R_E \Vert R_L)} \frac{R_E}{R_E + R_L}$	$\frac{R_B[h_{ib} + (R_E \Vert R_L)]}{\frac{R_B}{\beta} + h_{ib} + (R_E \Vert R_L)}$
		Short forms, if $h_{ib} \ll R_E \Vert R_L$ and $R_B \ll (R_E \Vert R_L)\beta$: 1	$\frac{R_B}{R_L}$	R_B
Common base		Long forms: $\frac{R_C \Vert R_L}{h_{ib} + \frac{R_B}{\beta}}$	$\frac{+R_C}{R_C + R_L} \frac{R_E}{R_E + h_{ib} + \frac{R_B}{\beta}}$	$R_E \Vert (h_{ib} + \frac{R_B}{\beta})$
		Short forms, if $h_{ib} \ll R_E$ and $R_B \ll \beta R_E$: $\frac{R_C \Vert R_L}{h_{ib} + \frac{R_B}{\beta}}$	$\frac{R_C}{R_C + R_L}$	$h_{ib} + \frac{R_B}{\beta}$