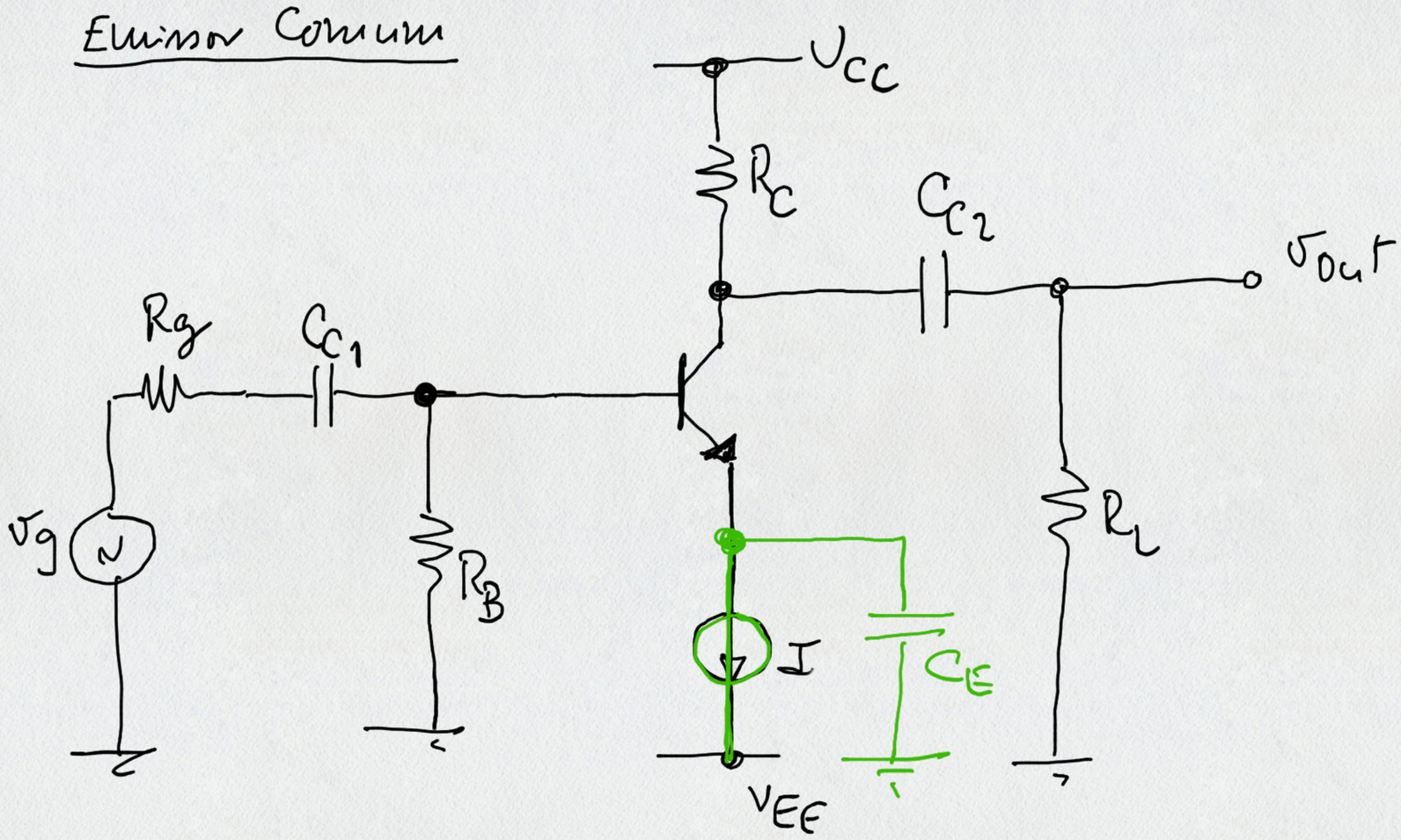
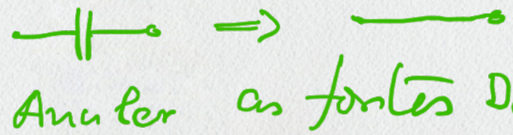
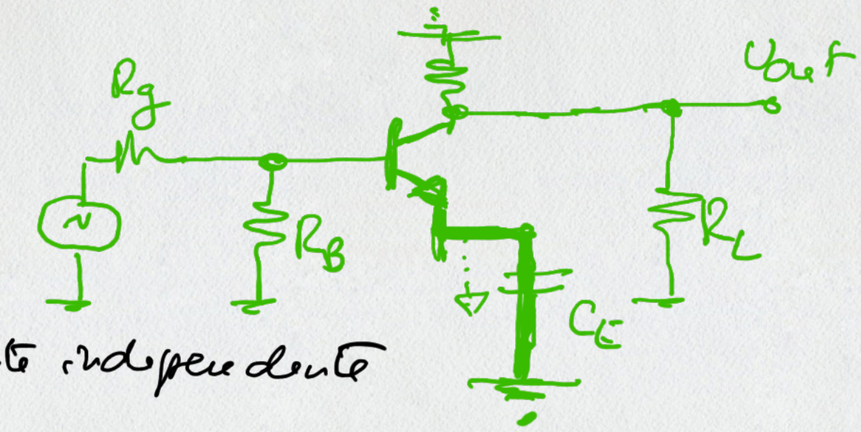
Emissor Comum



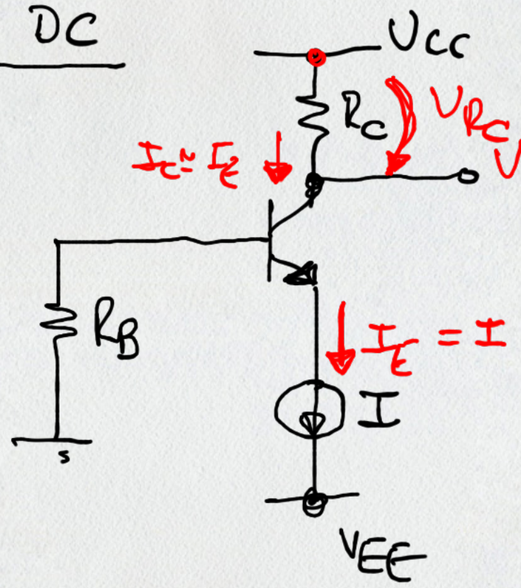
Em AC



Anular as fontes DC

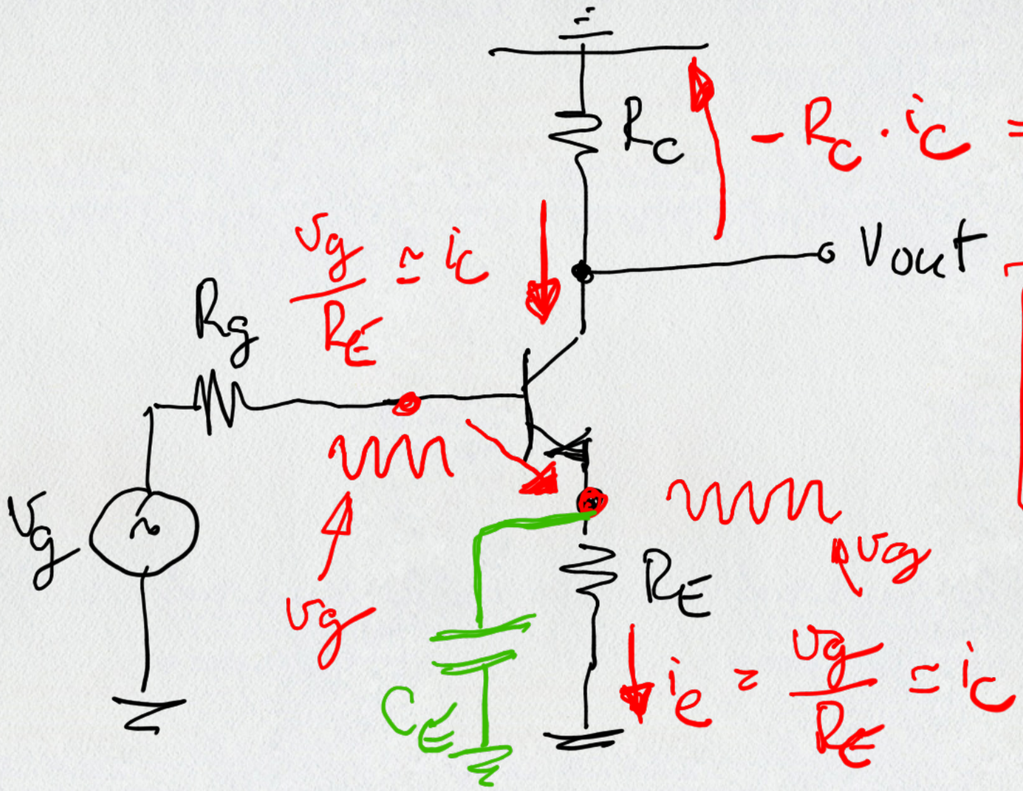


Em DC



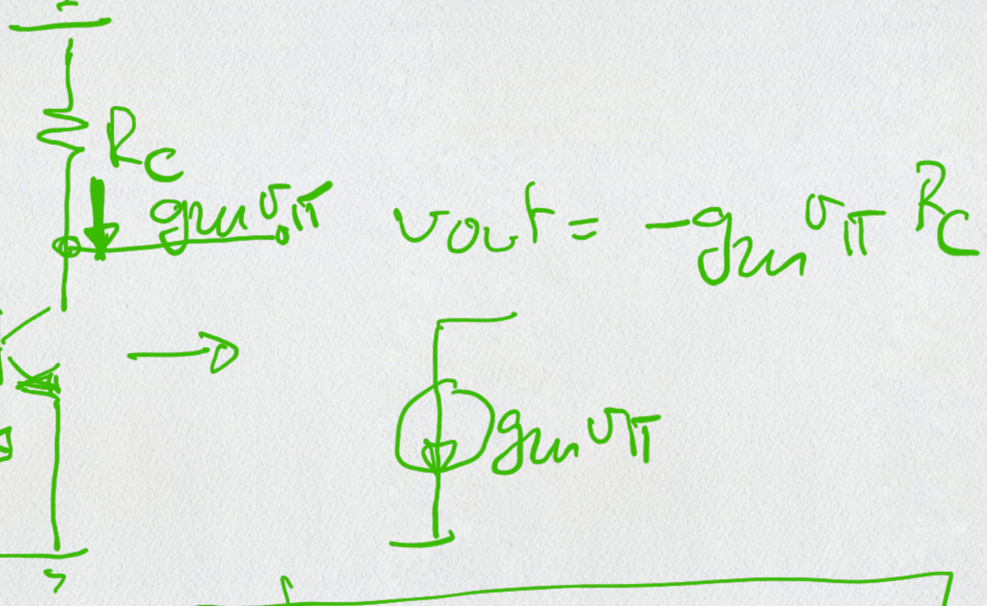
$$V_{out} = V_{CC} - V_{R_C} = V_{CC} - R_C \cdot I_C$$

I é uma fonte de corrente independente

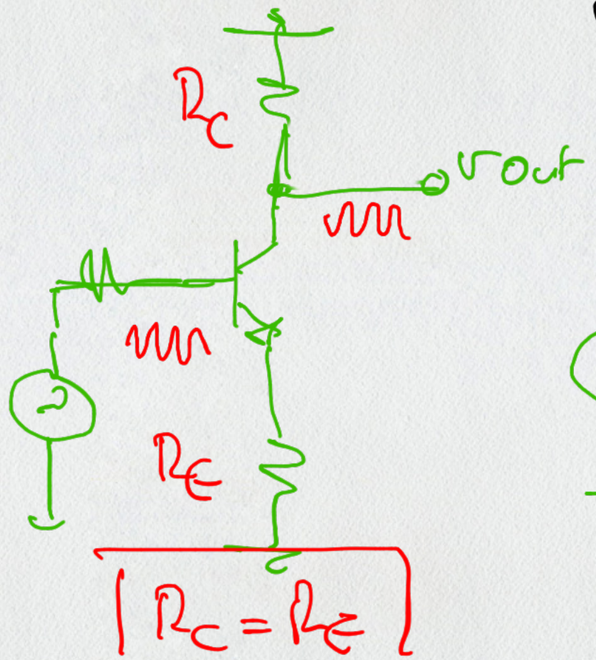


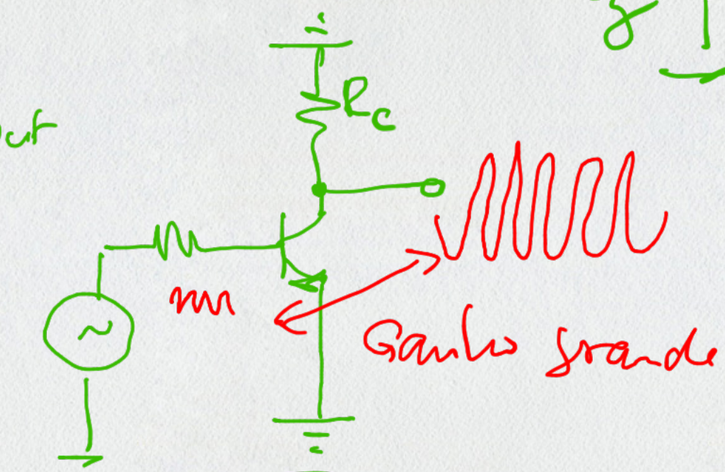
$$\frac{v_{out}}{v_g} = -\frac{R_C}{R_E}$$

Ganho de tensão

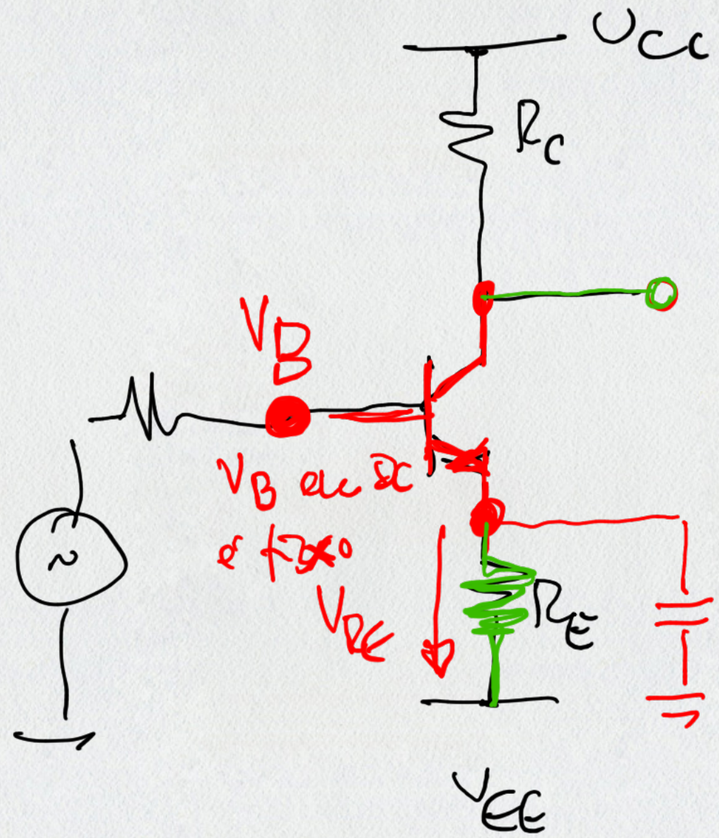


$$\frac{v_{out}}{v_g} = -\frac{R_C}{R_E}$$

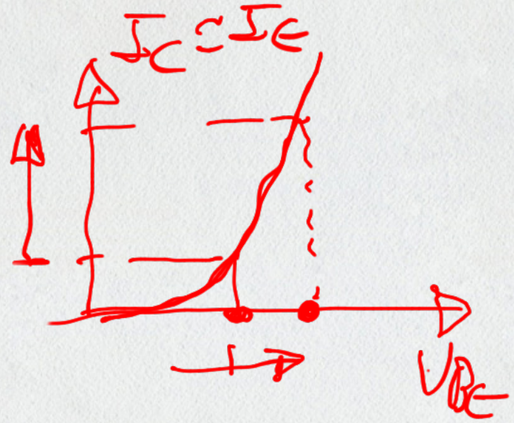




$$\frac{v_{out}}{v_g} = -g_m R_C$$



Qual é o papel de R_E ??



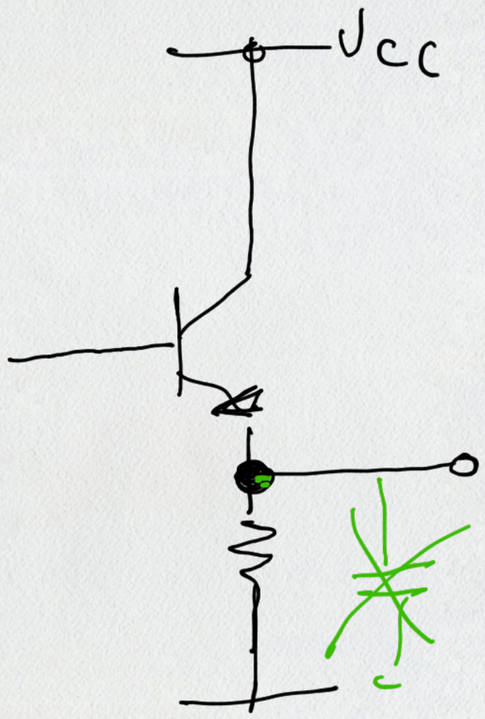
$T \uparrow \rightarrow V_{BE} \uparrow \rightarrow I_E \uparrow$

$I_E \uparrow \rightarrow V_{RE} \uparrow \rightarrow V_{BE} \downarrow$

$R_E \rightarrow$ Estabiliza o PFR

à custa de perda de ganho em AC

Para recuperar o ganho $\rightarrow$ C_E de desacoplamento p/ ligar o emissor à massa.


Vcc