Session 23
Multistage Amplifiers
Exercises

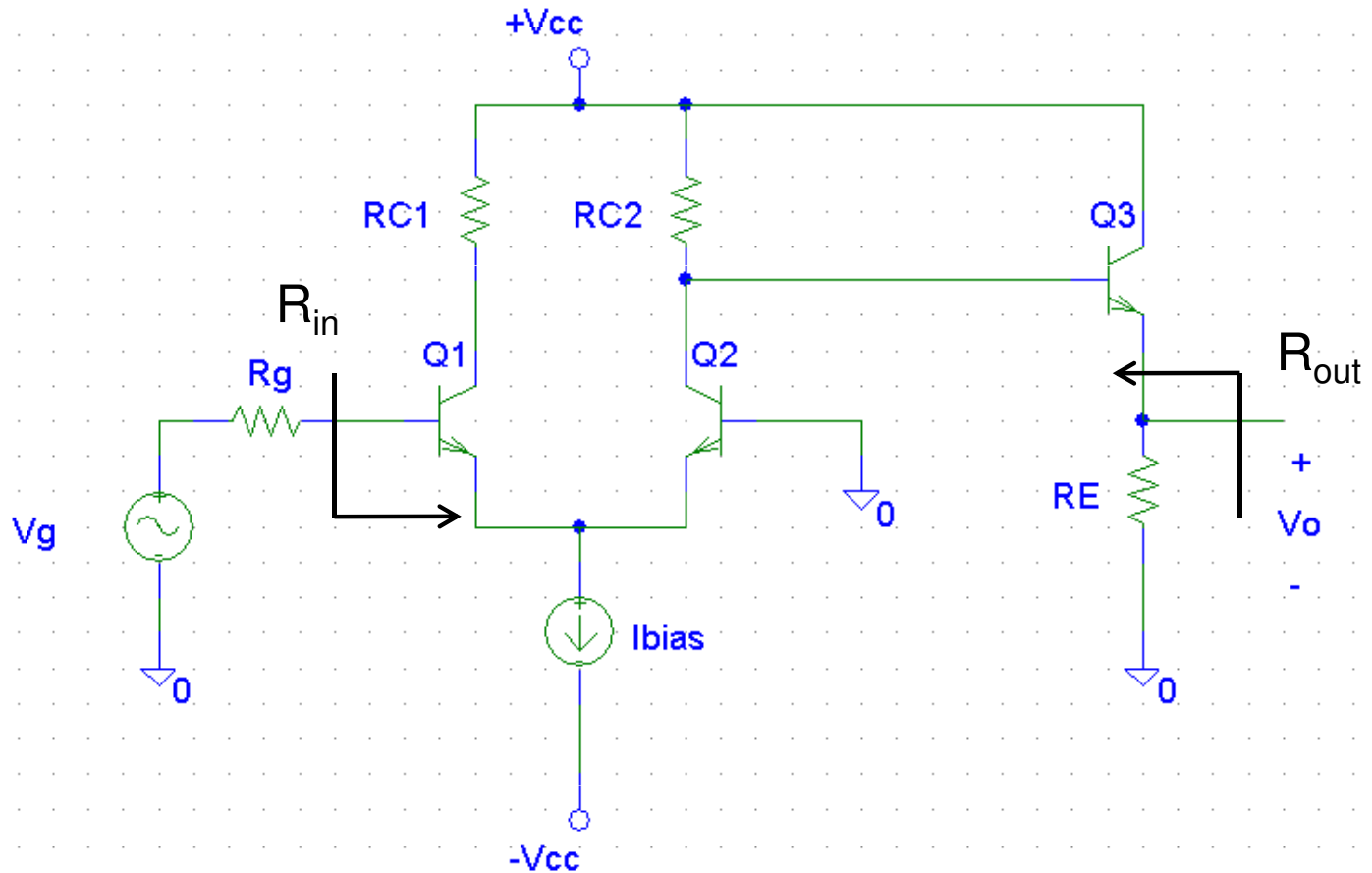## Electronic Components and Circuits

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Multistage Amplifiers

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- Numerical resolution of an example, including the obtaining of the midband gain of a multistage amplifier that includes a differential stage, the input impedance, the output impedance and the high cut-off frequency.

Proposed Exercise

V_{cc} = 15 V

I_{bias}= 1 mA

R_{C1} = R_{C2} = 10 kΩ R_E = 560 Ω R_g = 50 Ω

BJTs: β_0= β_F =250 , V_T = 25 mV, V_{BE}=0.6V, C_π=2 pF, C_μ=0.7 pF