October 25, 2022

ECEN 325

Homework #5 Hints

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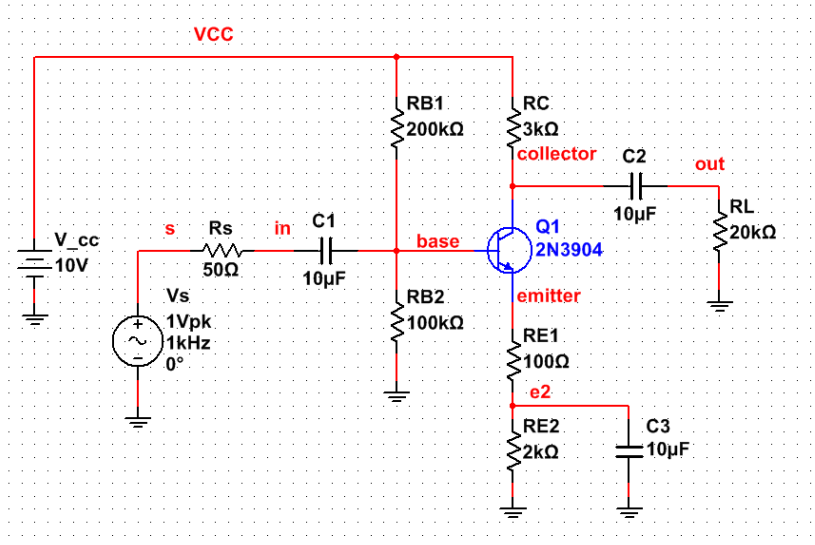
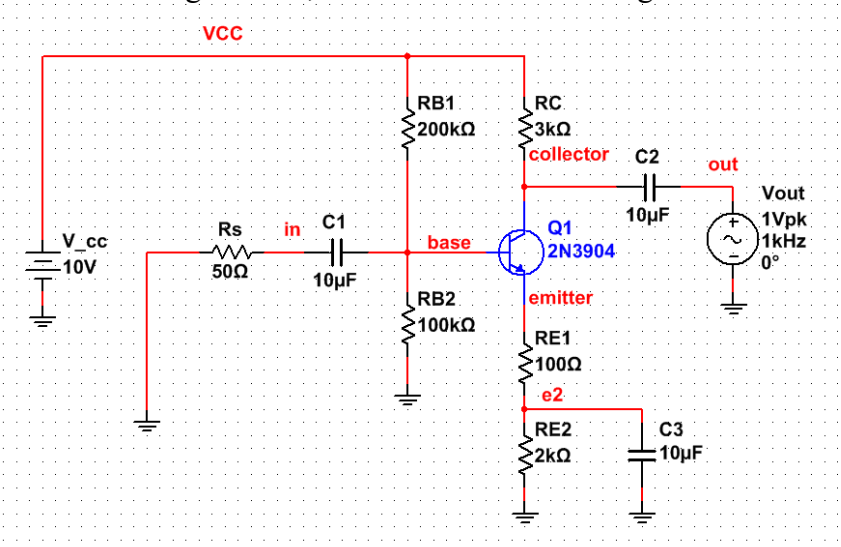
For a circuit such as the following:



In order to plot Rin, run an AC simulation and plot V(in)/I(C1). At mid-band frequencies, V(in) is the same as the voltage at the transistor base and I(C1) is the input current. Plot it in dB (same as dBΩ).

In order to plot Rout, it is easiest to make a copy of your original schematic and edit it by removing the input source (grounding it), removing the load resistor and replacing it with your Rout test voltage source, as shown in the following:



In order to plot Rout, run an AC simulation and plot V(out)/I(C2). V(Vout) is the output test source voltage and I(C2) is the current going into the output node. Plot it in dB (same as dBΩ).