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Format for **prelab** ece3274. Must include units.

1. Estimated Q-Point.

1a. Plot the estimated Q-Point on V-I characteristic cures for the transistor.

1b Calculate the transistor parameters **Handwritten**.

2. Design calculation.

2a. Calculate the values for the variables list in the experiment document. **Handwritten.**

2a. Draw a schematic of the amplifier. Label the components, voltages, currents, and any notes. With viable name you will use in the equations

2b. Use the amplifier design documents to calculate your design values.

Must show the calculations in the form of:

Write out the equation you are using. Fill in the values.

Re = 120Ω

Ref = 50Ω

Reb = Re - Ref = 120 - 50 = 70Ω Fill in the variables. Circle the exact calculated value.

Reb = 68Ω Box the value of the real component value you will use.

3. LTspice.

3a. Run the LTspice simulation using your exact values.

3b. Label the component names to match your schematic from your design

3c.Include plots, LTspice schematic.

Format for **experiment report** ece3274 built at home. Must include units.

1. Built the experiment on your breadboard with real component values.

2. Measure the built circuit voltages and current requested (remember do not use an ammeter measure current measure the voltage across a known resistor)

3. Fill out Lab Report Data Sheet (handwritten). This data sheet is to help you not miss any measurements.

4. Include schematic, and any plots or graphs.

5. I Include a Photo of your built circuit on your breadboard.