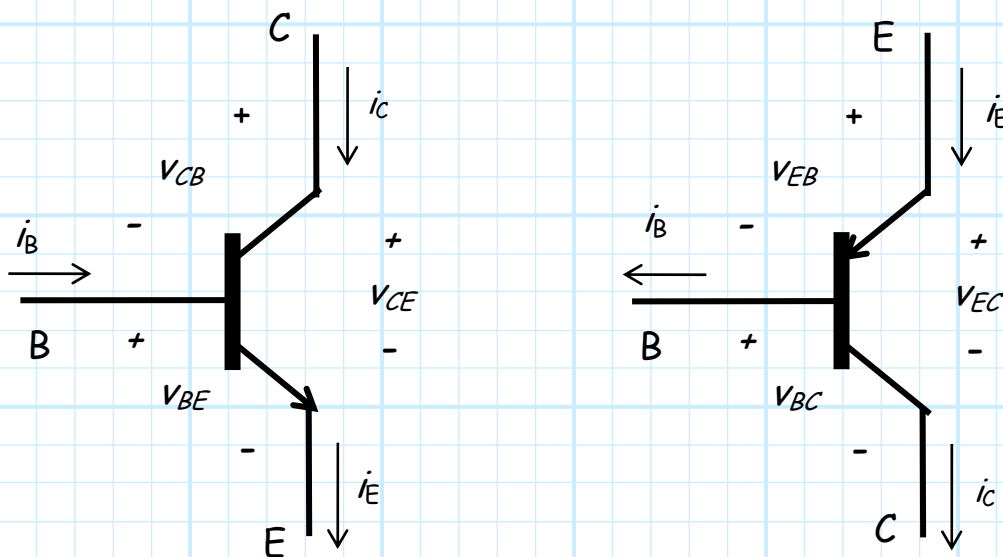


Hints for BJT Circuit Analysis

1. Know the BJT symbols and current/voltage definitions!



2. Know what **quantities** must be determined for each **assumption** (e.g., for active mode, you must determine one BJT current and one BJT voltage).
3. Write **separate** equations for the BJT (device) and the remainder of the circuit (KVL, KCL, Ohm's Law).
4. Write the KVL equation for the circuit's "**Base-Emitter Leg**". In other words, write a KVL that includes V_{BE} .

5. Forget about what the problem is asking for! Just start by determining **any** and **all** the circuit quantities that you can. If you end up solving the **entire** circuit, the answer will be there somewhere!
6. If you get stuck, try working the problem **backward!** For example, to find a resistor value, you must find the voltage across it and the current through it.
7. Make sure you are using **all** the information provided in the problem!