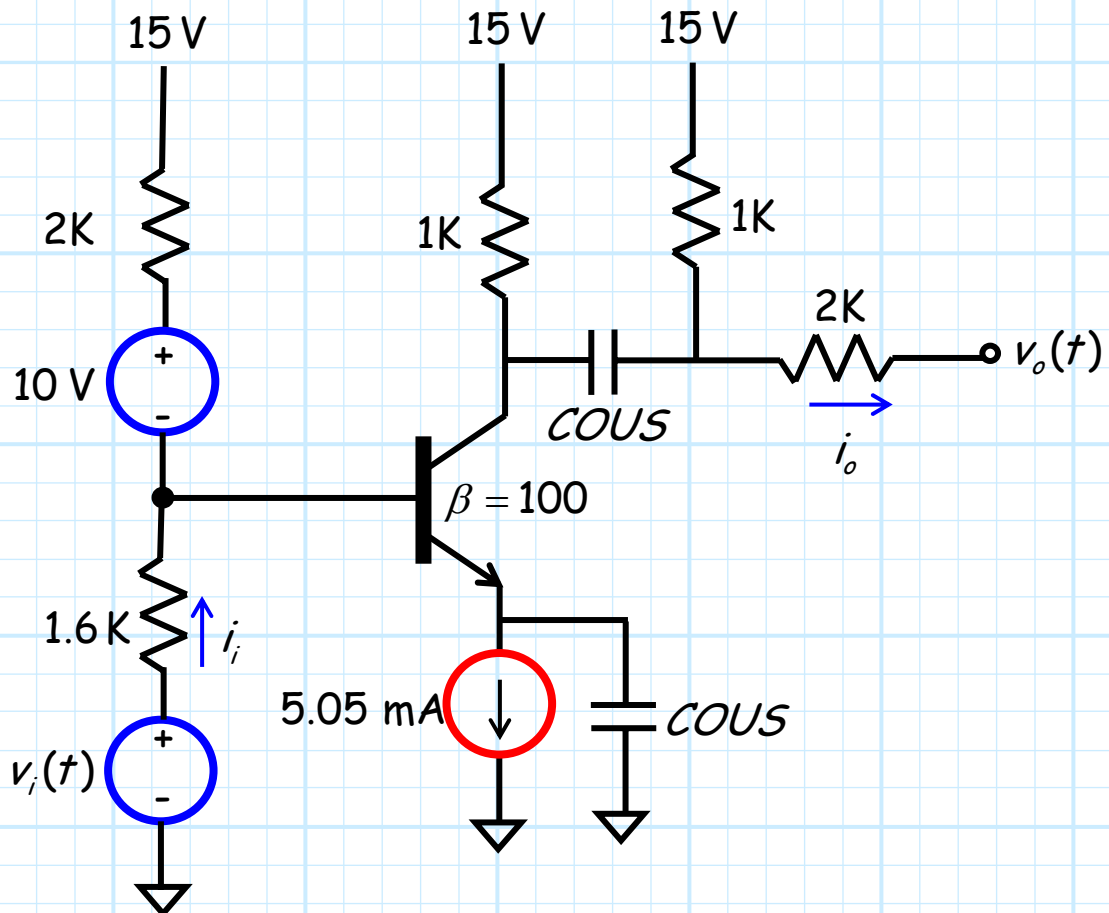


### Special Problem 5.6-4

I have completed the DC analysis of this amplifier.

The collector current is  $I_C = 5.0 \text{ mA}$ , and the BJT is in the active mode.



**Continue** with this analysis and determine:

1. The **small-signal open-circuit voltage gain** of the amplifier.
2. The **small-signal output resistance** of the amplifier.
3. The **small-signal input resistance** of the amplifier