## Special Problem 5.5-1

For the circuit below, the DC solution has been evaluated, and the transconductance $g_{m}$ of each transistor has been found to be $g_{m}=1 \mathrm{~mA} / \mathrm{V}$.

The capacitors are very large.

Determine the small signal gain $A_{V}=v_{0} / v_{i}$ for this two transistor amplifier.

Note: Do not attempt to analyze this circuit for its DC parameters! You have enough information to proceed directly to the small-signal analysis and determine $A_{v}$.


