

Special Problem 1.5-2

Amplifier A1 has:

- an input resistance of $750\ \Omega$.
- an output resistance of $10\text{K}\Omega$.
- an open-circuit voltage gain of $100\ \text{V/V}$.

Amplifier A2 has:

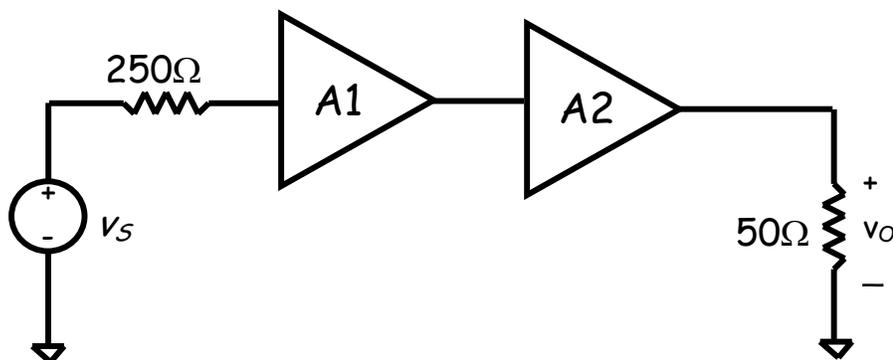
- an input resistance of $30\ \text{K}\Omega$.
- an output resistance of $50\ \Omega$.
- an open circuit voltage gain of $1\ \text{V/V}$.

A voltage source with a source resistance of $250\ \Omega$ is connected to the input of the common-emitter amp.

The output of the first amp (A1) is connected to the input of the second (A2).

The output of the second amp is connected to a load of $50\ \Omega$.

I.E.,



What is the value of v_o/v_s ?