Special Problem 1.5-2

Amplifier A1 has:

      an input resistance of **750** Ω.
      an output resistance of **10KΩ**.
      an open-circuit voltage gain of **100 V/V**.
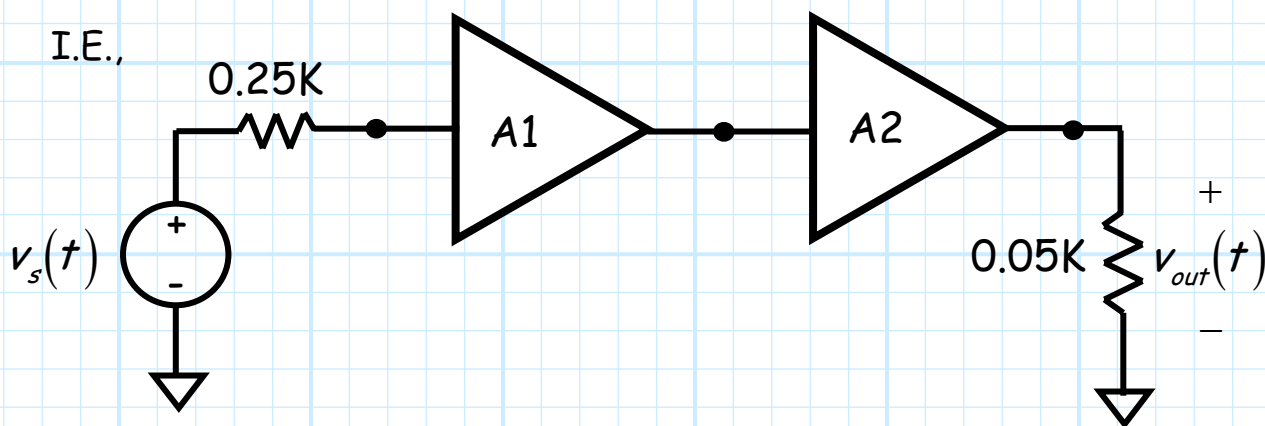
Amplifier A2 has:

      an input resistance of **30 KΩ**.
      an output resistance of **50** Ω.
      an open circuit voltage gain of **1 V/V**.

A voltage source with a source resistance of **250Ω** is connected to the input of the first 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** Ω.

I.E.,

What is the value of $v_{out}(t)/v_s(t)$?