

Special Problem 1.5-3

Two amplifiers are cascaded together, as shown below.

For amplifier A, the relevant parameters are:

$$A_{vo} = 100$$

$$R_i = 9\text{K}$$

$$R_o = 900$$

For amplifier B, they are:

$$A_{vo} = 50$$

$$R_i = 100$$

$$R_o = 1\text{K}$$

1) What then is the value v_o/v_i ?

2) What would be the value of v_o/v_i if the gain of the second amplifier is **reduced** to $A_{vo} = 10$, **and** its output resistance also reduced to $10\ \Omega$?



