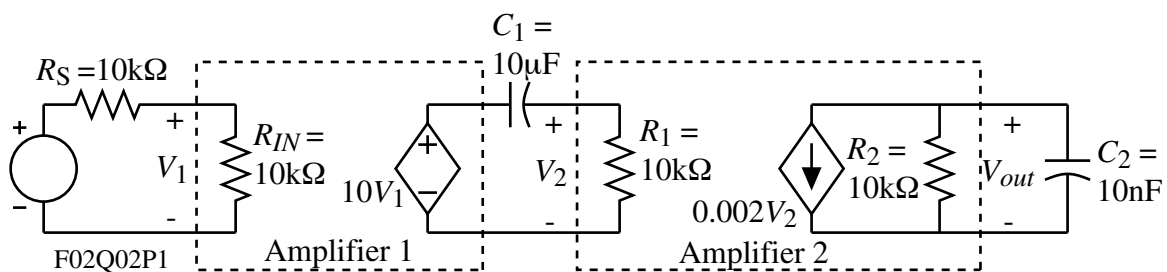


**Homework Assignment No. 2**

Due on Wednesday, January 22, 2003

- 1.) Problem 11.16 of the text.
- 2.) Problem 11.34 of the text.
- 3.) Problem 11.37 of the text.
- 4.) Problem 11.43 of the text.
- 5.) Problem 11.55 of the text
- 6.) a.) Find the transfer function,  $V_{out}(s)/V_S(s)$ , of the circuit shown and identify the location of the poles and zeros. What is the gain in the region where the transfer function is independent of frequency?



- b.) Sketch the asymptotic (straight-line) plot for the magnitude and phase of transfer function shown. Use the same plot for phase shift. Label the phase shift on the right side of the plot.

$$A(s) = \frac{-10s}{(s+1)(s+100)}$$

