# 18-321
# Homework #1

**Due February 4, 2000**

1. Draw the magnitude and phase plots on seperate pages (graphs) for the transfer function below.[1] Following the instructions from lecture, rewrite the equation in the form most suitable for creating a Bode plot.

$$H(s) = \frac{(s + 2 \times 10^{11})}{s^2 + 1.01 \times 10^5 s + 10^8}$$

2. Problem 1.12 from the textbook.

3. Problem 1.17 from the textbook. Fig. 1.17(b) is on pg. 20.

4. Problem 1.34 from the textbook.

5. Problem D1.36 from the textbook.

6. Problem 1.43 from the textbook. Use seperate pages (graphs) for the magnitude and phase plots. Copies of semilog paper are attached.

7. Problem 1.45 from the textbook.

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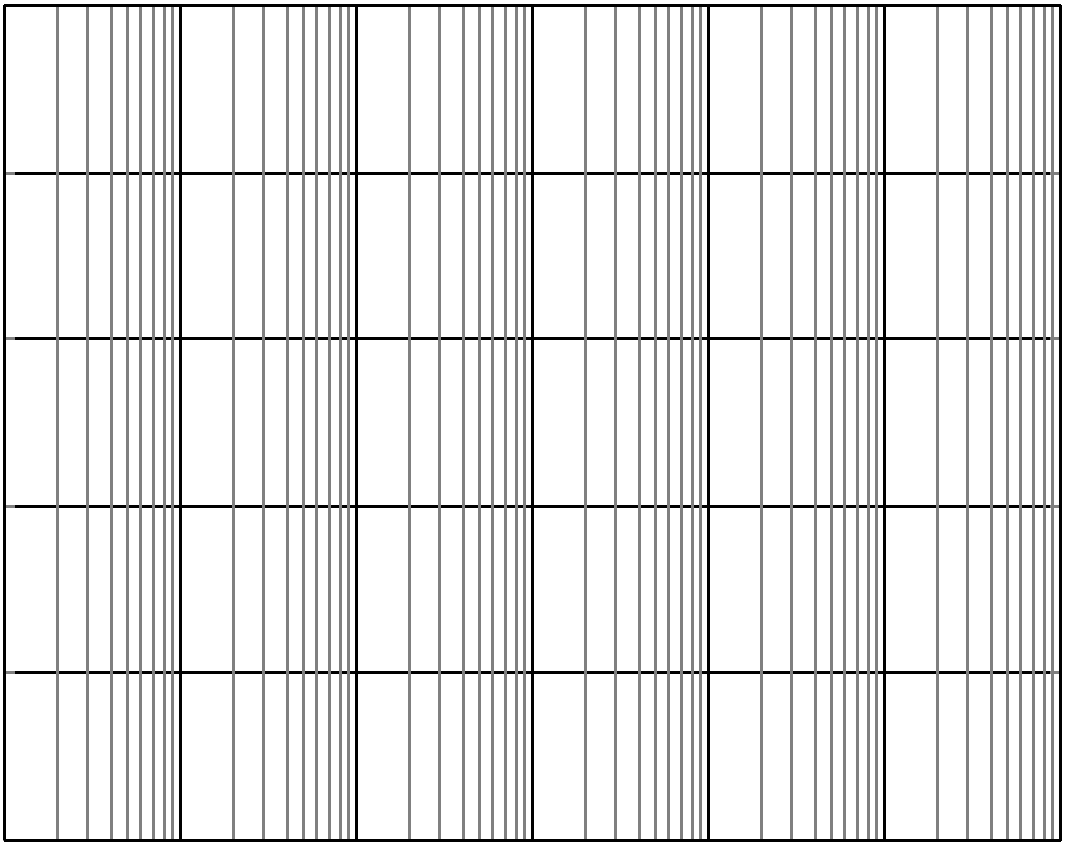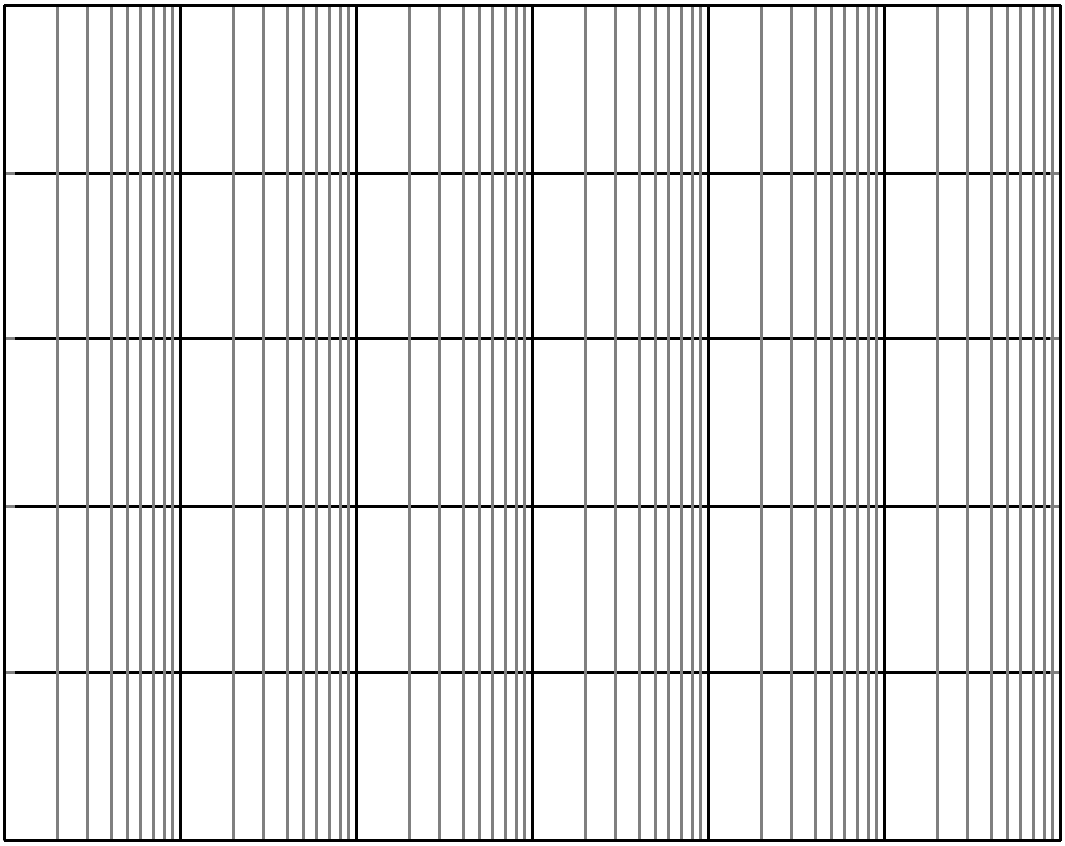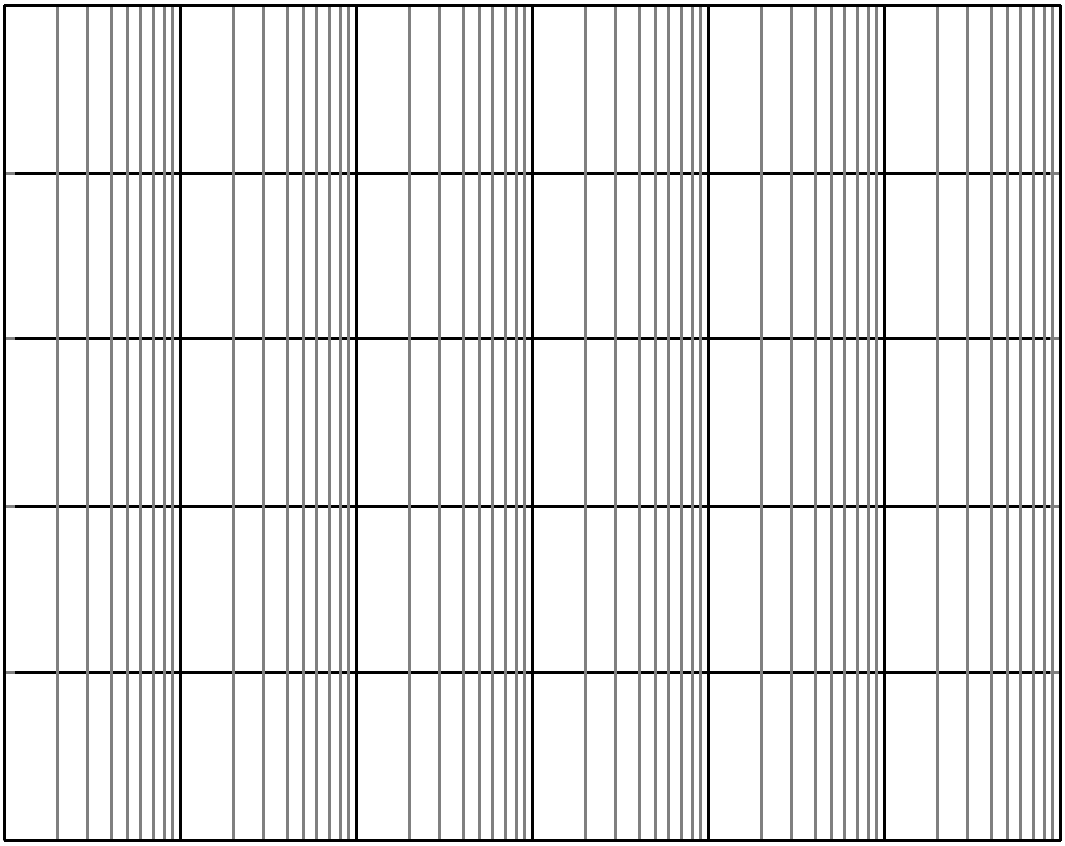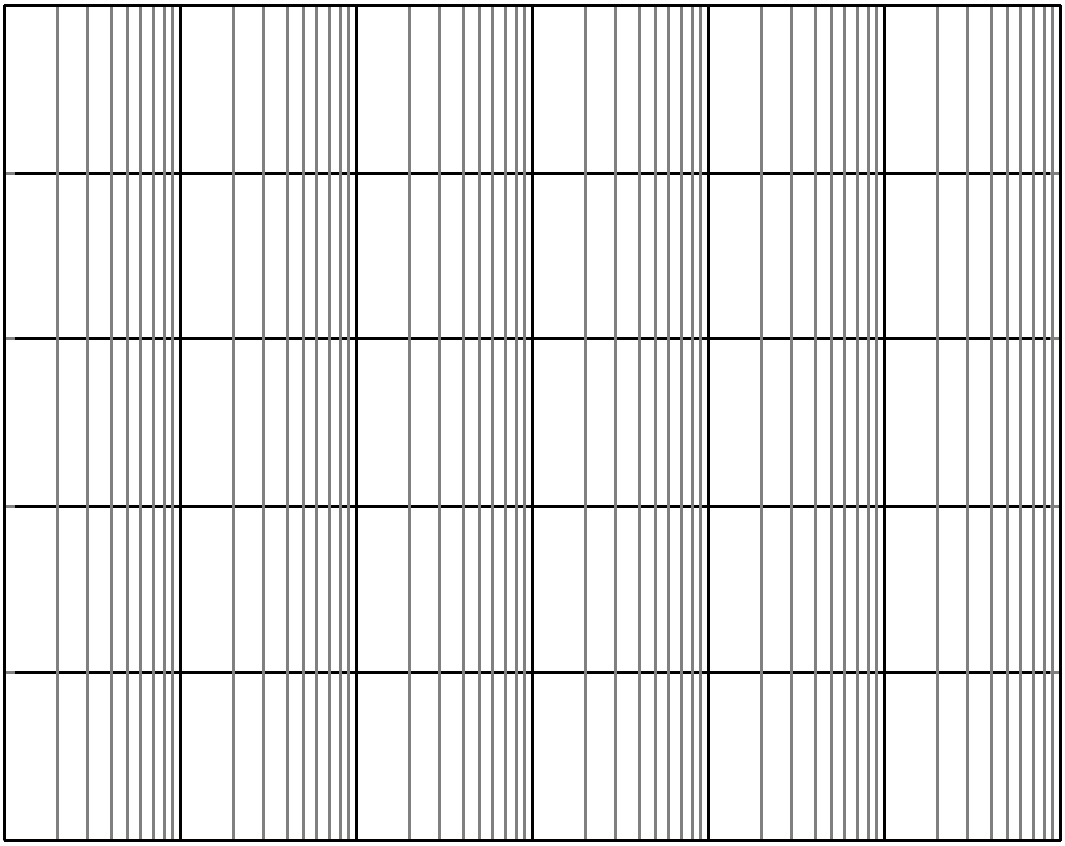
1. Copies of some semi-log paper are attached to this homework assignment. Additional copies can be obtained from the course web site.