

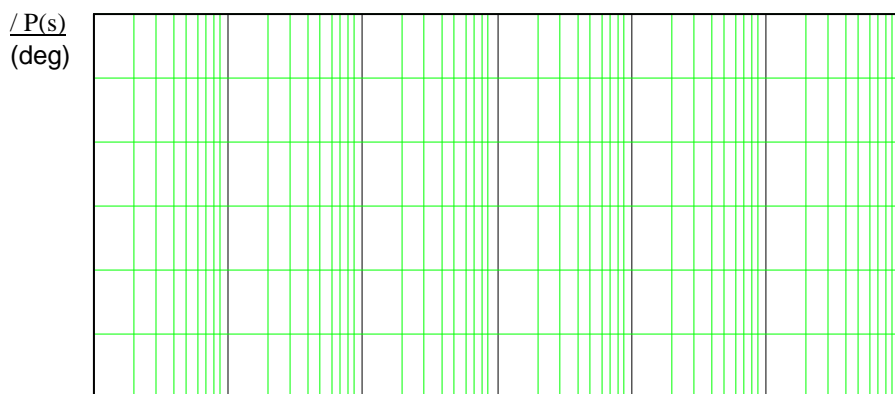
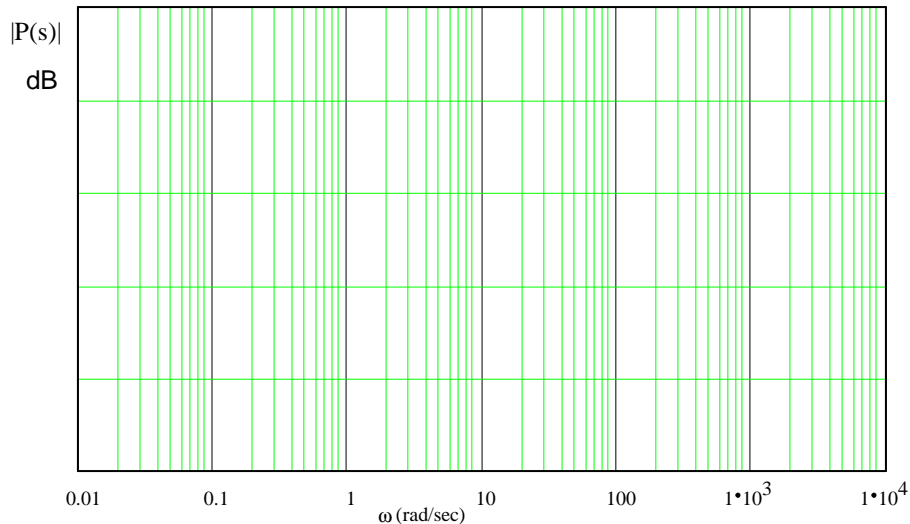
Name _____

ECE 3510 Homework Bd2

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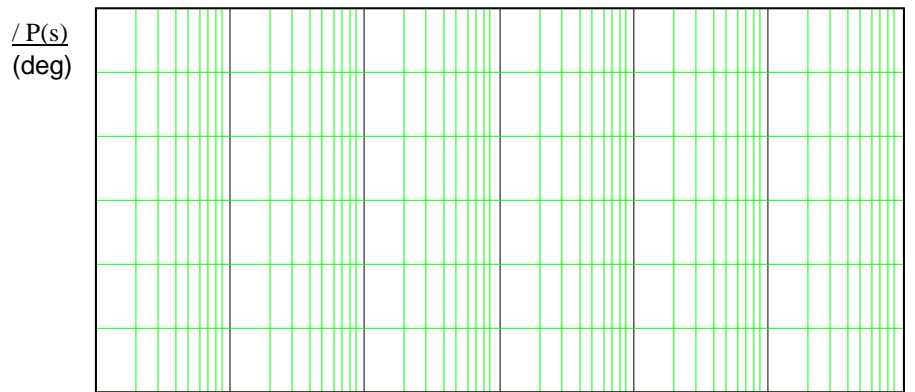
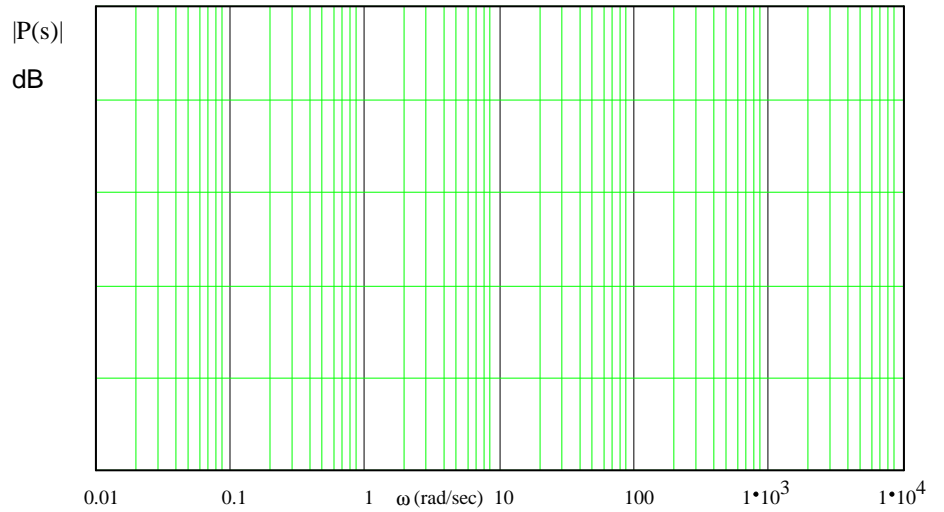
1. Sketch the Bode plots for the following transfer functions. Label the graphs, give the slopes of the lines in the magnitude plot and draw the "smooth" lines.

a)
$$P(s) = \frac{s + 50}{s^2 + 0.4s + 4}$$



b)
$$P(s) = \frac{s^2 + 2s + 100}{s^2}$$

plot on next page



c) $P_2(s) := \frac{(s+4) \cdot (s+2000)}{s^2 + 2 \cdot s + 1600}$ plot below

