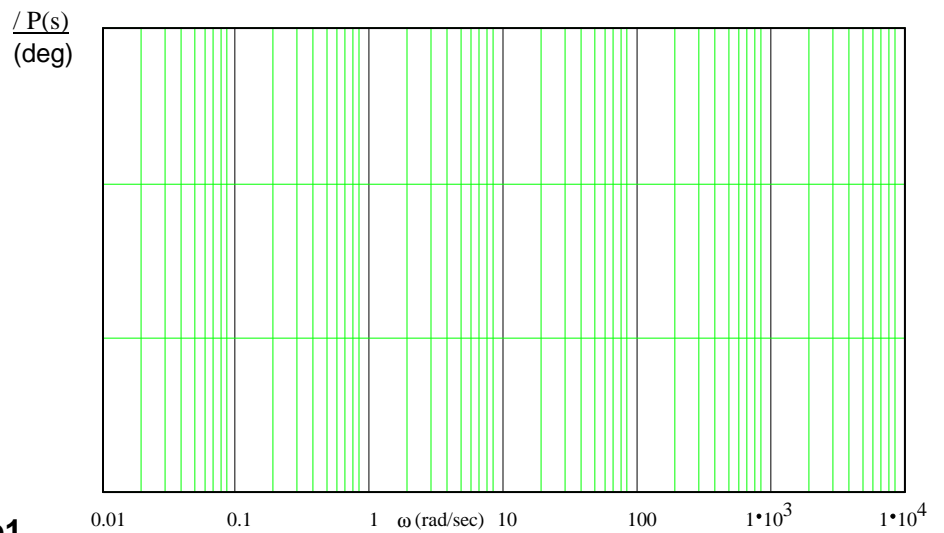
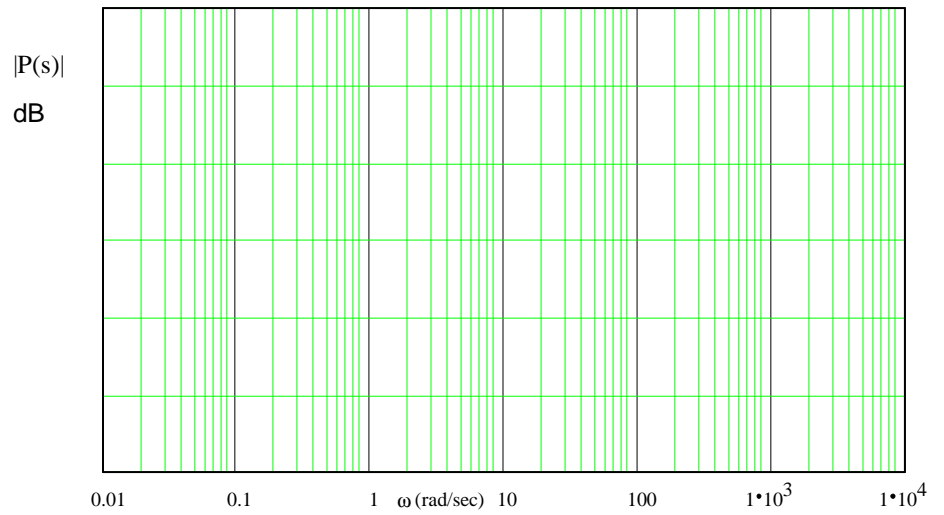
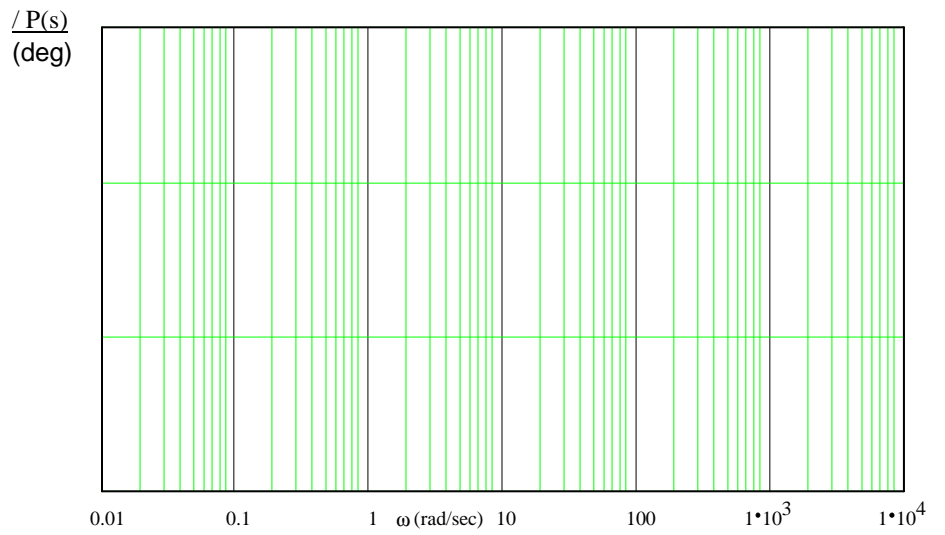
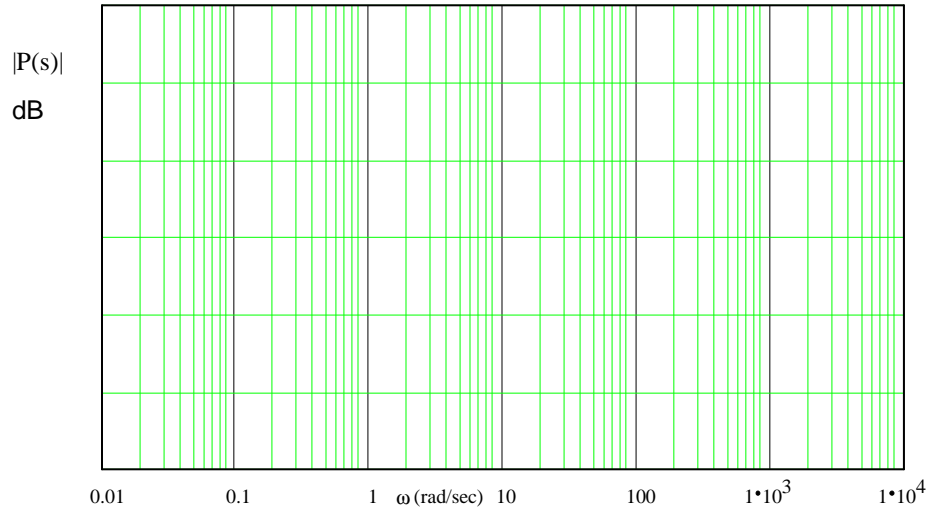


1. Sketch the Bode plots for the following transfer functions.
Label the graphs, give the slopes of the lines in the magnitude plot and draw the "smooth" lines.

a)
$$P(s) = \frac{s + 10}{(s + 1)(s + 100)}$$

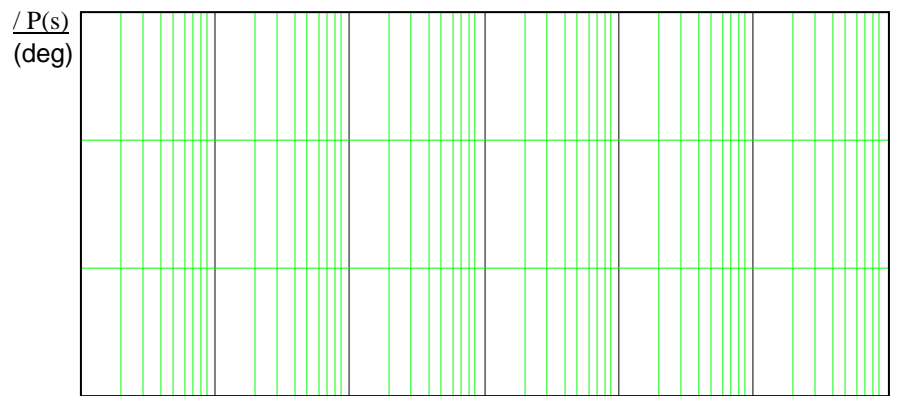
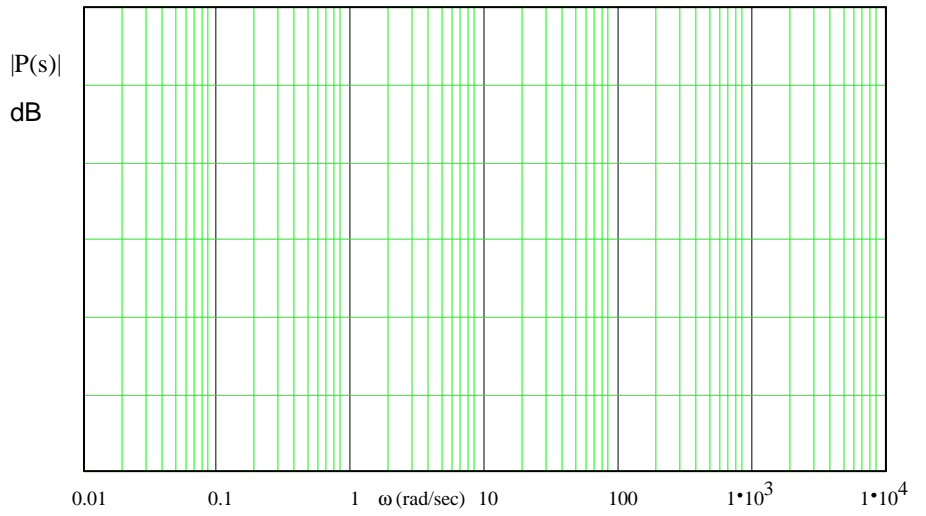


b) $P(s) = \frac{s - 0.4}{s \cdot (s + 400)}$

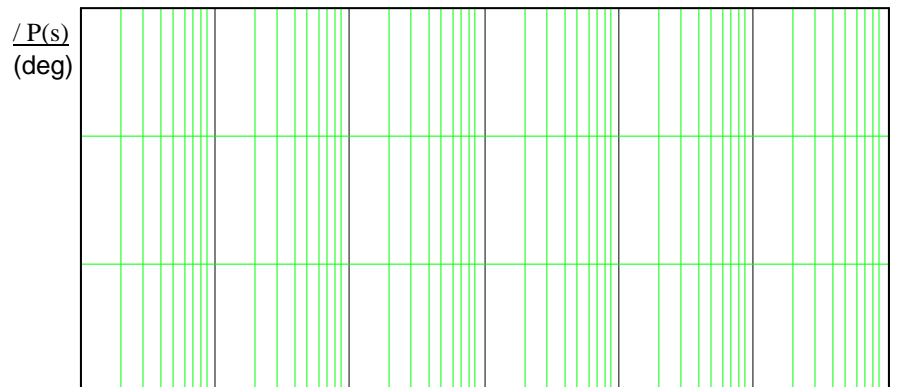
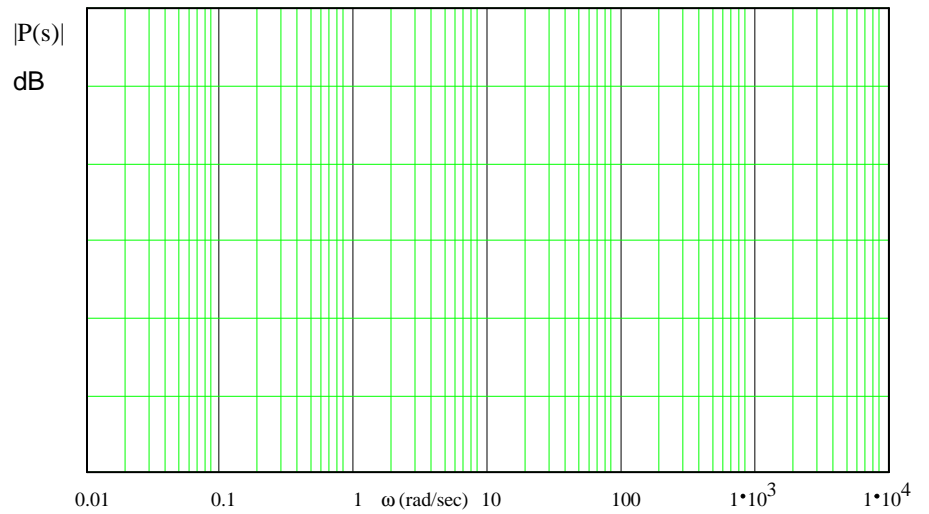


c) $P(s) = \frac{800 \cdot (s - 10) \cdot (s + 10)}{(s + 0.1) \cdot (s + 400)^2}$

plot on next page



d) $P(s) = \frac{900}{(s+30)^2 \cdot (s+1)}$



Answers

