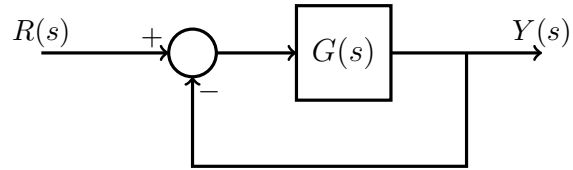# EENG307: Intro to Feedback Control

Fall 2020
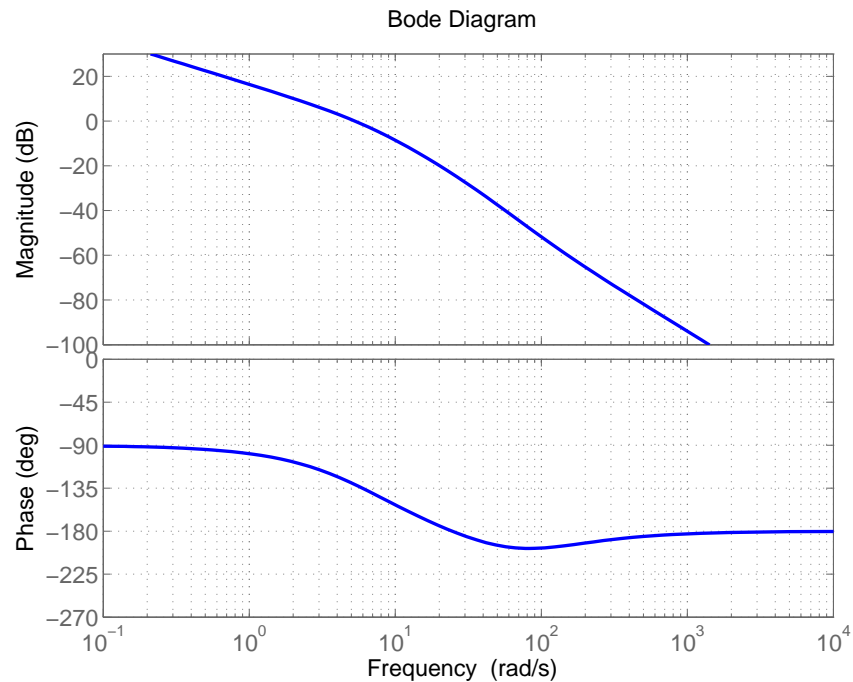
Homework Assignment #11

Quiz #6

Quiz Question Monday: Consider following unity gain feedback system.

The following is the Bode plot of $G(s)$, which has all poles in the left half plane, except for one pole at $s = 0$. Sketch the Nyquist plot and find the phase and gain margins

Bode Diagram

(a) $GM = 12.6,\ \phi_{PM} = 90°$

(b) $GM = 12.6,\ \phi_{PM} = 45°$

(c) $GM = 12.6,\ \phi_{PM} = \infty$

(d) $GM = 0.08,\ \phi_{PM} = 135°$

(e) $GM = 22,\ \phi_{PM} = -45°$