

# EENG307: Intro to Feedback Control

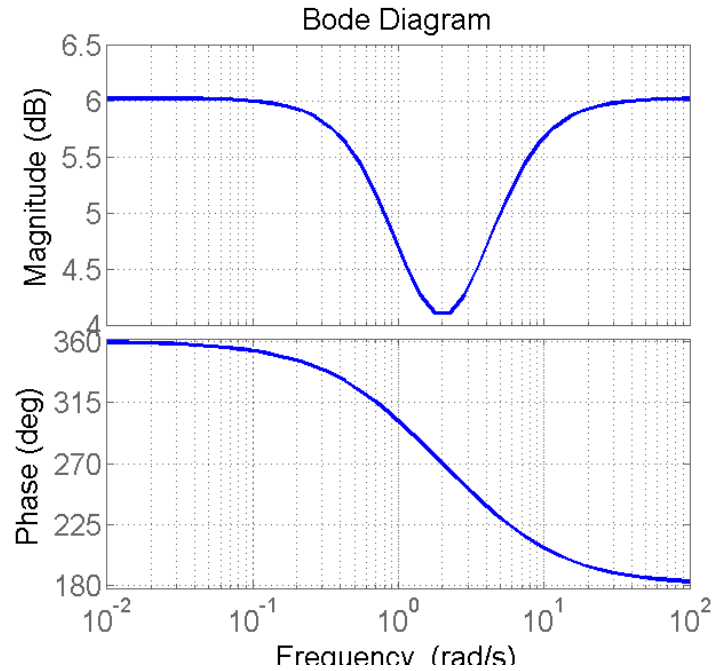
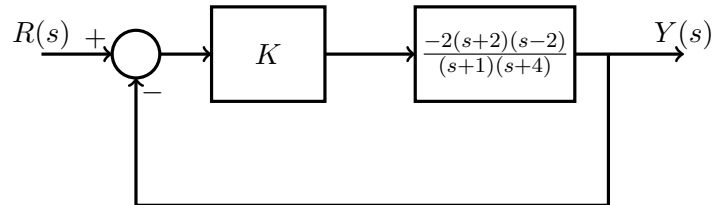
Fall 2020

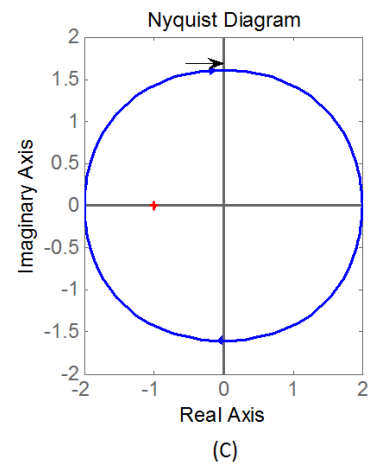
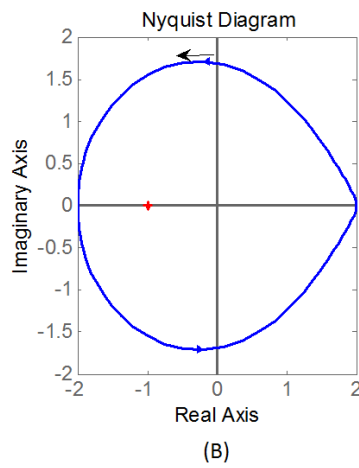
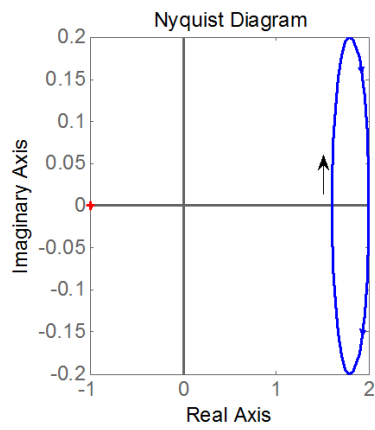
Homework Assignment #10

Quiz #4

Quiz Question Monday: A unity gain feedback system with  $K = 1$  and its Bode plot are shown below.

1. Based on clues from the Bode plot magnitude and phase, determine which of the Nyquist plots is correct. (Note that arrows have been added to indicate directionality.)
2. Based on your answer to (a) and the Nyquist stability criterion, is the closed-loop system stable?





Provide the answers to part 1 and 2 (seperated by a comma).

- (a) (C), No
- (b) (B), Yes
- (c) (A), No
- (d) (B), No
- (e) (A), Yes