

# EENG307: Intro to Feedback Control

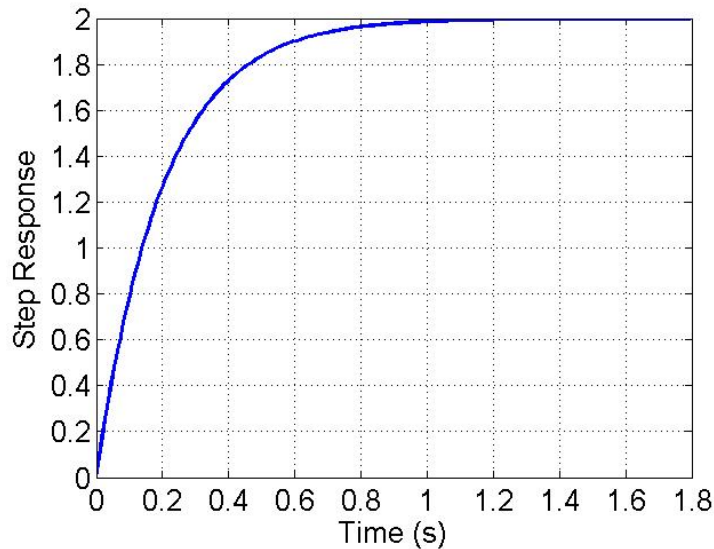
Fall 2020

Homework Assignment #5

Quiz #1

Quiz Question Friday: A client provides you with a transfer function and unit step response plot for a system you are analyzing.

$$G(s) = \frac{100}{s + 50}$$



- (a) Based on the client-provided transfer function  $G(s)$ , estimate the rise time and 1% settling time for the step response. *Only one significant digit is needed; feel free to use rounding approximations such as  $1.4 \approx 1$  and  $1.6 \approx 2$ .*
- (b) Estimate the rise time and 1% settling time from the plot.
- (c) Did the client provide the plot that corresponds to the transfer function? For full credit, briefly explain why or why not within the space provided.

Which of the following is the answer to part (c)?

- (a) Yes
- (b) No