

Practice Test

Midterm #1

ECE 452/552: Control Systems Design I

- Closed book and closed notes, except as described below.
- One only ($8\frac{1}{2}'' \times 11''$) page of handwritten notes is permitted. (Written on both sides is OK).
- No calculators can be used.
- Scrap paper is not to be used. Show all work on the exam paper.

Student name: _____

Problem 1.

Obtain the z transform of

$$X(s) = \frac{s}{(s+1)^2(s+2)}$$

Question 2.

For the system shown below, obtain the closed-loop pulse transfer function $C(z)/R(z)$.

