

**Homework 4**  
**ECE 551, Spring 2008**  
**Due: Wed., April 23**

- (1) P6.1 b,c: Use the Routh Criterion (i.e., find the answer by hand), then verify your solution using Matlab (i.e., compute the roots in Matlab and provide them).
- (2) P6.1 e
- (3) P6.4 a: Do not just find the limiting value of  $K$  for stability, find the whole range of values that the parameter  $K$  can take on (there is a lower value of  $K$  and an upper value).
- (4) P7.1 a,b,c: Sketch the root loci by hand (show all steps as we had done in class), then verify your solution with Matlab (i.e., provide Matlab generated plots that show you got the right answer).