Homework 3, Linear Systems, Fall 2007

- When turn in your homework, please write down: 作業次別, 姓名, 學號, 系級, 日期
- Assigned: 11/6/07, Due on 11/20/06

- **(Stability Analysis)**   10 points/each

  Consider the systems studied in Problems 1, 2, 4, 6 of HW1 and use the solution provided for their respective $\mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}$.

  Discuss the stability of these systems in terms of values of these parameters used to model the systems.

  That is, describe whether the system is marginally stable or asymptotically stable or unstable with respect to different values of the related parameters.

  For example, in Problem 1, you might need to find the range of R_1 or L, such that the system is (m./a.) stable or unstable.