Nonlinear Control Systems

AA/EE/ME 583
University of Washington

HW 1

Explicitly show all the steps. Correct answers without clearly written steps will get zero credit. Label all graphs. Provide MATLAB code with comments. Clearly define all variables used in the code. I may only grade portions of the HW -- so answer all the questions correctly to get full credit.

a) Problem 1.11 from the text

b) Problem 2.1 from text. Do find the eigenvalues associated with each equilibrium point.

b) Problem 2.3 from text. Plot phase portraits using MATLAB; add plots of trajectories for illustrative initial conditions, and discuss the qualitative behavior of the equilibrium points.