350: Homework 7 Due: 5/April

1. Do 9.2.1.

2. Do 9.2.3.

3. Do 9.2.6.

Computer Aided Homework

C. 1. Produce plots of the solutions of the Lorenz equations. First do  $\sigma = 10, b = 8/3$  and r = 28. Then try varying r (and, if you like, the initial conditions). Hand in a couple of plots that you like. My octave code is available on request if you are stuck. (See exercises 9.3.2-9.3.7 and 9.5.1-

9.5.4)

C.2. Do 9.3.10, but also with a third initial condition that is closer to the

first.

Bonus problems - don't hand in with the assignment. These are just for practice. (You are welcome to give them to me to grade, or to talk about them with me in my office hours. But they carry no credit).

Conceptual: 9.2.5, 9.3.8, 9.5.5

Applied: 9.3.9