# 350: Homework 5 Due: 8/March 

1. Do 6.5.6
2. Do 6.8.5
3. Do 6.8.6
4. Do 6.8.7
5. Do 6.8.8

Computer Aided Homework
C.1. Plot the phase portrait for the linearly damped pendulum

$$
\ddot{\theta}+\dot{\theta}+\sin (\theta)=0 .
$$

C.2. Plot the phase portrait for the non-linearly damped pendulum

$$
\ddot{\theta}+[1+\cos (\theta)] \dot{\theta}+\sin (\theta)=0
$$

