

PHYSICS 331 ADVANCED CLASSICAL MECHANICS  
Problem Set 8

*Problem 1*

Use Excel (or any other program) to sketch out Figure 4.23 on page 173. This uses the iterative equation (eqn 4.46 on p 170):

$$x(n+1) = \alpha x_n(1 - x_n).$$

Change  $\alpha$  enough to produce enough data to interpolate to get the data.

NB: I recommend that people work together (decide that each person does a certain number of experiments) and then *pool* your data. Working together and sharing data will give you the best results.