ASTR450 Homework # 2 – Central Force Motion
Due Thursday, September 14

Reading: Danby's Chapter 3. Go over HW #1 with the solution set.

1. Danby: Page 53, Problem 1 (Easy). What is the most general motion that satisfies these constraints?

2. Danby: Page 53, Problem 2 (Easy). $\mathbf{F} = \mathbf{P}$ is a force.

3. Danby: Page 53, Problem 7 (Easy) . Use $\mathrm{x} = Ae^{mt}$ (with A and m constants to be determined) and construct the most general solution in each case.

4. Danby: Page 53, Problem 8 (Moderate). Assume the oscillation frequency $\omega = \sqrt{k/m}$ with k constant.

5. Danby: Page 53, Problem 19 (Easy). Write down all speeds in km/s to three or four significant figures and compare.