

ASTR450 Homework # 2 – Central Force Motion  
Due Thursday, September 21

Reading: Danby's Chapter 4 and Appendix A.

1. Danby: Page 82, Problem 1. Consider all finite values of  $C$ , the total energy per unit mass.
2. Danby: Page 82, Problem 2.
3. Danby: Page 83, Problem 4.
4. Danby: Page 83, Problem 5. Cross out the words "or otherwise"!
5. Danby: Page 83, Problem 6. Test your answers numerically with the Central Force Integrator program which can be reached from the class web site. Sketch (or print out) a few example orbits for each of the four force laws.