

## Homework 4

Please write all your work and answers on separate paper. (You can turn in this page with the questions or not, as you wish). Show all your work on calculations and explain your reasoning whenever you can.

1. **Properties of Planets I:** The study of the planets could be the subject of an entire separate course. We can only look at some of the most interesting and important properties of the planets. From the list below, select at random **three** items and explain what it is and how it might be measured. Cite the source of your information.
  - a. Orbit size
  - b. Orbital eccentricity
  - c. Orbital period
  - d. Orbital inclination
  
  - e. Rotation axis
  - f. Direction of rotation
  - g. Length of day
  
  - h. Mass
  - i. Density
  - j. Temperature range
  - k. Composition
  - l. Atmosphere
  - m. Radius (or diameter)
  
  - n. Number of moons
  - o. Number of rings
  
2. **Properties of Planets II:** Each planet has its own special properties, even though it may share common traits with some or all of the other planets. For each planet, describe the property or properties that distinguish it from all the other planets. Restrict yourself to just the properties listed in the previous problem. List the planets in their proper order, include Pluto, and don't forget to include Earth.