Astronomy 330 Spring 2008 Homework #7

Due in Class: Thursday, Mar. 27

Note: This homework should be typed.

For each question, use facts from lecture to develop reasonable answers.

- 1. Choose a planet or moon in our solar system. Generally discuss the object (i.e. structure, atmosphere, availability of solvents, etc.).
- 2. If life exists on that planet or moon, how might it function and where might it live? Explain your answers.
- 3. How would you design a space mission to detect that organism?
- 4. Would you expect that organism to use DNA/RNA and proteins? Explain.

New set of questions:

- 5. A planet far, far away has evolved intelligent life. Describe this *hypothetical* planet.
- 6. Compare possible life in the Solar System and life on Earth to that planet. What similarities or differences would you expect?
- 7. Discuss a possible path to intelligence. What are some problems and advantages?
- 8. Will this intelligent life look like us? Why or why not?