Astr 150 Assignment 4: retrograde motion
due Thurs Feb 12, 2009

Answer the following questions. All questions are weighted equally. The word limit of 250 will be strictly enforced.

1. Explain in words the cause of the retrogradation of superior planets. Use of a diagram is optional but recommended, but the diagram must be hand-drawn.

2. Is retrogradation a real motion (the planet is physically moving backwards), or just an optical illusion?

3. How often do each of the following planets go retrograde: Mars, Jupiter, Saturn, Uranus, and Neptune?

4. What is the formal definition of the “synodic period” (follow the link to a different wikipedia page).

5. Planets that are farther from the Sun go retrograde more often; why?

Requirements for a good assignment

- The assignment will be graded strictly, as expected for a university-level course. The assignment is graded out of 30 points.
- Have your name, SID, and a word count at the top of the paper. Use question-and-answer format when writing your assignment, do NOT hand in a run-on paragraph (50% penalty).
- Be typed, double-spaced, of maximum length 250 words. Assignments longer than 250 words will receive zero credit. Try to be environmentally conscious and print on both sides of the paper.
- Use quotations only to illustrate your point, not to make it. If you are unclear about this requirement, then speak with the instructor.
- Show completeness of information, conciseness of expression, have a logical development of ideas, and evidence of thought regarding the content.
- Be professional of presentation, e.g., no ragged ends, creases, or ink blobs on the paper.
- If you reference any written sources at all, then you must give a bibliographic entry.
- In all ways, the author should show pride in his/her work.