

Introduction to Astronomy

HW071001

due in one week

1. Find out what the Alexandrian Library was. Around 200 BC, its librarian and director Eratosthenes devised a way to measure the circumference of the earth, to an admirable accuracy. Describe his method.
2. Our textbook features an article by Mr. James Randi who works to expose trickery. Read his essay on "*Why Astrology Is Not Science*". Describe and comment on what his reasoning is.
3. Photocopy a flight route map from Taipei to New York from an airline company website. Confirm that the route is close to a great circle.
4. Use the U. S. Naval Observatory website to find the times of sunset and sunrise on (a) your birthday and (b) the date this assignment is due. Are the times the same for the two dates? Explain why or why not.
5. How many more sidereal months than synodic months are there in a year? Explain the reason.