Reading Assignment for Tuesday, January 31

All reading assignments refer to the text: Voyages Through the Universe.

- Chapter 1, sections 1.1.3 → 1.4.4 (p. 22 – 38).
  As you finish reading this chapter, be sure to keep your attention focused on the big picture of what is being presented, and not get mired in the details (e.g., you do not need to know which constellations are on the ecliptic on which dates, but you do need to know what the ecliptic is!). Achieving a good mental picture of the celestial sphere can be challenging; it’s the kind of thing, though, that once you figure out what’s going on, everything just falls into place. Working with an actual physical model of the celestial sphere (like we did in class) can help greatly, so I encourage you to stop by my office hours and/or visit the TA help room to work with them. Other key areas to make sure you understand from this reading include Eratosthenes’ measurement of the Earth’s size; how retrograde motion is explained in the heliocentric model of the solar system; and why Venus’ observed phases spelled the death of Ptolemy’s geocentric cosmological model. We covered much of this in class, but the book spells it out in more detail in some areas.

Writing Assignment

Please answer the following questions/problems from the textbook; the more complete and well-reasoned your answer is, the better. Unless you will be writing lots of mathematical equations, or including many explanatory diagrams, please type your responses.


2. Page 41, “Figuring for Yourself” Question #19, part (c) only. Note that for this question you may assume that the “strange planet” you are on is spherical.

Please note: Although the writing assignment is being given this week (and you are expected to complete it this week), it will not be collected until Thursday, February 16. As discussed last week (and in the syllabus handout), homework will be assigned every week, but will only be turned in every 5 weeks or so (at which point you turn in all of the accumulated homeworks together). The exact dates for the homework collections are given in the syllabus.