AST 101 Spring 2008
Chapter E Weekly Problems
from *Astronomy: A Beginner's Guide to the Universe 5/E*

NOT TO BE TURNED IN!
Complete and understand the Review and Discussion questions and the Problems to prepare for the quizzes.

**Review and Discussion:**

Q3. Why does the Sun rise in the east and set in the west each day? Does the Moon also rise in the east and set in the west? Why? Do stars do the same? Why?

Q4. How and why does a day measured by the Sun differ from a day measured by the stars?

Q7. Why are there seasons on Earth?

Q14. What two pieces of information are needed to determine the diameter of a faraway object?

**Problems:**

P2. Given that the distance from Earth to the Sun is 150,000,000 km, through what distance does Earth move in a second? An hour? A day?

P6. At what distance is an object if its parallax, as measured from either end of a 1000-km baseline, is (a) 1°, (b) 1′, (c) 1″?

P9. The Moon lies 384,000 km from Earth, and the Sun lies 150,000,000 km away. If both have the same angular size, how many times larger than the Moon is the Sun?