Homework #2
Astronomy 10, Section 2
due: Monday, September 12, 2011

For the following problems, you must show your work in order to get credit.

1) If the Earth did not rotate, could oyu define the celestial poles and celestial equator? (chapter 2, review question 8)

2) Where would you go on Earth if you wanted to be able to see both the north celestial pole and the south celestial pole at the same time? (chapter 2, review question 9)

3) Explain two reasons why winter days are colder that summer days. (chapter 2, review question 11)

4) Do planets orbiting other stars have ecliptics? Could they have seasons? (chapter 2, discussion question 3)

5) Imagine the diagram below is a photograph taken in mid-September (see text for a higher resolution version). Use the star charts at the back of the book to decide

about what time of night the photo was taken. (chapter 2, learning to look 3)

6) Which lunar phases would be visible in the sky at dawn? (chapter 3, review question 1)

7) Identify the phases of the Moon if at sunset the moon is a) near the astern horizon, b) high in the southern sky, c) in the southeastern sky, and d) in the southwestern sky. (chapter 3, problem 2)

8) About how many days must elapse between first-quarter moon and third-quarter moon? (chapter 3, problem 3)

9) The stamp below shows a crescent moon. Explain why the moon could never look

this way. (chapter 3, learning to look 4)