

CH 2

Review Questions 1-2, 10-12 (DUE 1/8)

1. Why are most modern constellations composed of faint stars or located in the southern sky?
2. How does the Greek-letter designation of a star give you clues both to its location and its brightness?
10. Why does the number of circumpolar constellations depend on the latitude of the observer?
11. Explain the two reasons why winter days are colder than summer days.
12. How do the seasons in Earth's southern hemisphere differ from those in the northern hemisphere?

Problems 2-4, 7-8 (DUE 1/8)

2. If one star is 6.3 times brighter than another star, how many magnitudes brighter is it?
3. If light from one star is 40 times brighter (has 40 times more flux) than light from another star, what is their difference in magnitude?
4. If two stars differ by 7 magnitudes, what is their intensity ratio?
7. By what factor is the sun brighter than the full moon? (*Hint: See Figure 2-6, though this may be numbered differently, depending on the edition of your book.*)
8. What is the angular distance from the north celestial pole to the summer solstice? To the winter solstice? (This is a two-part question!)