

Due Date & Time: September 17, 2010 at 12:15 PM

Reading Assignment:

Seeds & Backman: Chapter 4: Astronomical Telescopes, etc...

Instructions:

- The assignment needs to be typed, except for equations, calculations, etc. You may not “cut and paste” from any sources.
- All diagrams and figures that accompany the assignment should be hand drawn—no “cut & paste”.
- Late assignment will be marked down by 50%.
- No late assignment will be accepted beyond 7 days.

Problems:

1. If you have limited funds to build a large telescope, which type would you choose, a reflector or refractor? Why? [5 points]
2. Name and explain at least three basic properties of an optical telescope. [5 points]
3. Explain the relationships between speed, wavelength, frequency, and energy of light. [5 points]
4. Chapter 3, Review Questions # 1, 3, 5, 7, 9 & 12, page 55 [23 points]

Bonus Problem:

Explain how Kepler’s Law(s) contradicts uniform circular motion. [10 points]