

Physics 202

Week of December 5, 2005

Pre-Lab QUIZ: Mirrors and Lenses LC-2, and part of Optical Instruments L-3

This week you will do lab LC-2:

Experiment I. "Radius of curvature and focal length of a concave mirror"

Experiment II. "Lenses", part 1 only: "Converging lens with short focal length"

You will not do part 2: "Focal length of a converging lens", or any later parts of LC-2

You will also do the first part of L-3:

Experiment 1. "Inverting telescope"

1. Describe how you can determine which side of the mirror used in Experiment 1 is concave and which is convex?
2. Appendix D; define *parallax* and explain how to use it to focus a telescope with crosshairs for parallel rays.
3. When you look at a spoon and see your reflection upside down, is the image real or virtual?
4. Draw a sketch of an astronomical telescope and use it to compute the angular magnification for an object at infinity. Why will the magnification you measure in this lab be different?