Name: _____ Lab Section: _____ Date: _____

Prelab: Thin Lenses

Instructions: Prepare for this lab activity by answering the questions below. Note that this is a **Pre**Lab. It must be turned in at the start of the lab period. Time cannot be given in lab to perform PreLab activities. After the start of lab activities, PreLabs cannot be accepted. Points will be taken off if your work is not neat and well organized. **To receive credit you must show your work.**

1. (5 points) You place your light source 70.0 cm away from a converging lens; an image is produced on a screen 140.0 cm behind the lens. What is the focal length of the lens? What is the magnification of the image?

2. (5 points) Sunlight goes through a lens and focuses on a screen 28.0 cm away. What is the focal length of the lens?

3. (5 points) Since a divergent lens cannot form a real image, how will you measure the focal length of the diverging lens? Explain the process in detail and in your own words.