

Name _____

**PHYS319 Optics
Pre-lab**

Questions 1 & 2 taken from section 5.1 of Hecht

1. What is the focus of a 'bundle' of rays?
2. What is the most common function of an optical device?
3. What is the definition of "conjugate".

There are several definitions of conjugate (e.g., math definition or in chemistry.) We are seeking basic definition used in the context of "conjugate foci method" that you will see in this experiment. See on-line Merriam Webster dictionary.

4. The website below has an explanation of "conjugate points" and a **photo demonstrating what the conjugate foci method you will be using in this experiment looks like**. Go to this website and print (it should be one or two pages only)

<http://hyperphysics.phy-astr.gsu.edu/hbase/geoopt/conjug.html>

On this printed page you will find two photos. On each photo label & clearly mark object distance and image distance.

Lastly determine the size of the object using the magnification that is given in one photo. Show all work.

5. In this experiment you will use a spherometer. Explain what it is and how it works. A diagram would be useful. OK to use internet to find answer.