

## Geometric Optics - Goals

Goals:

Part I – Derive Eqs. 2 – 6.

Use autocollimation method to find  $f$  for telescope objective.

Find nodal points (and separation of principal points) of telescope objective.

Measure  $f$  etc. for the eyepiece using the method of magnification.

Part II – Derive Eqs. 9 – 12.

Build telescope and determine magnification with object at large distance.

Determine magnification with object at intermediate distance.

Derive an expression for the magnification of the telescope with object at intermediate distance.

Build a microscope and determine its magnification.