Optics 2 Problems
Review Session
2/3/26

D) Using the same "8X" magnifier, the image formed by the magnifier is now located 15.0 cm in front of the device:

What is the actual angular magnification when holding the magnifier this way?

Where is the object for the magnifier when holding the magnifier this way?

Where is the object for the eye located when using the magnifier this way?

How much accommodation is required to see the image clearly?

F) A microscope has a +25.00 D objective lens and a +10.00 D eyepiece that are 30 cm apart.

Where must an object be placed relative to the objective to view a clear image without accommodation?

What is the magnification?

What is the tube length?

G) A -3X telescope has a +20 D objective lens and a +60 D ocular lens, each with a diameter of 1 cm. Determine the size and location of AS, EnP, ExP, FS, EnW, ExW and determine the object field of view.

AS size and location

EnP size and location

ExP size and location

FS size and location

ExW size and location

EnW size and location

FOV