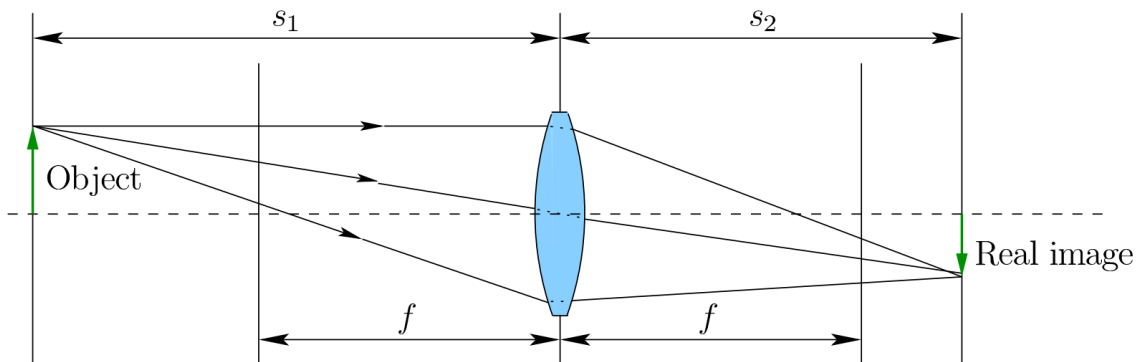
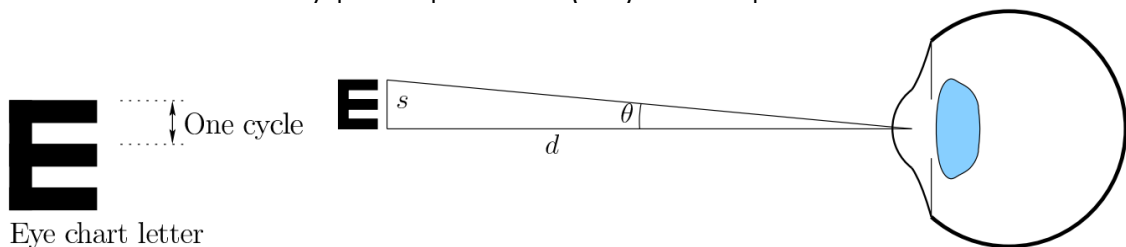


## Optics

1. Suppose an object is placed 5m away from a lens for which the focal length  $f = 1\text{m}$ . At what distance from the lens should a screen be placed so that the image is in focus? Or is it not possible for the object to be in focus?



2. Suppose a person with 20/20 vision is viewing a screen 1.5 inches away. If the display must be able to render 30 cycles to have acceptable resolution, how many pixels-per-inch (PPI) are required?



3. Barycentric coordinate review! What are the barycentric coordinates of the unlabeled points in the diagram below?

