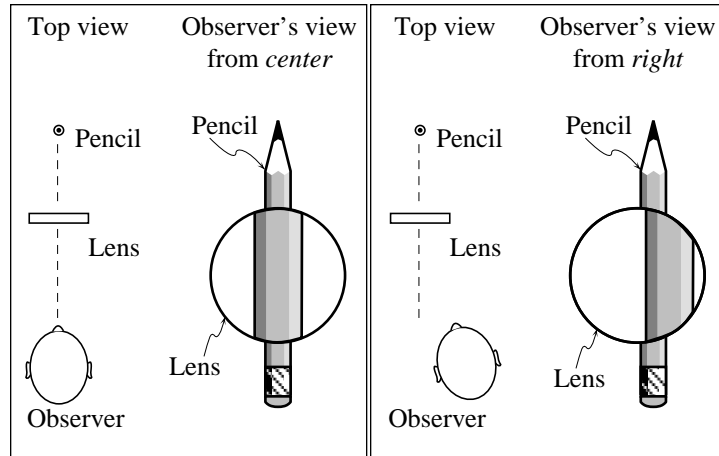


PRETEST: CONVEX LENSES

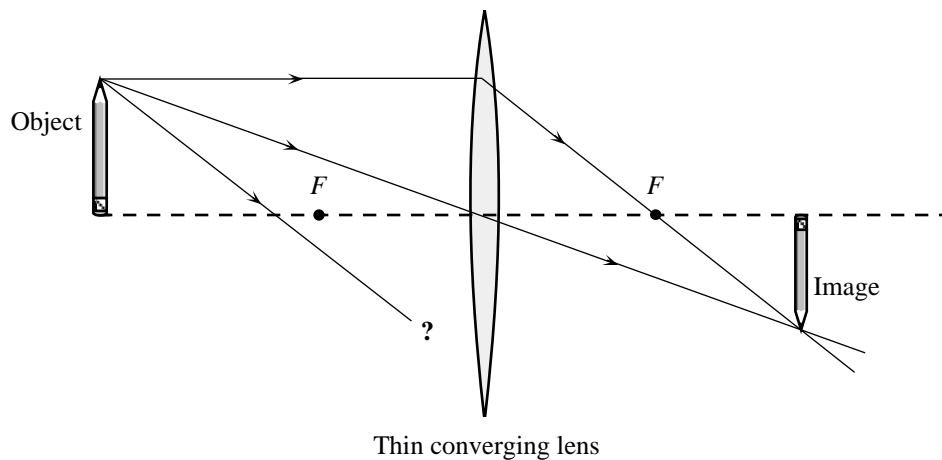
Grad Undergrad Faculty Other
 I have done this pretest/tutorial before

1. The diagrams at right illustrate what an observer sees when looking at a pencil through a lens. The observer's view is shown from two slightly different perspectives: one from the center, and one from the right.



Is the image of the pencil located *closer to, farther from, or the same distance from* the observer than the pencil itself? If it is not possible to determine whether the pencil or its image is closer to the observer, state that explicitly. Explain your reasoning.

2. An object is placed near a converging lens as shown below. Each focal point of the lens is marked by an F . Two rays have been drawn to determine the location of the image of the object.



Continue the third ray shown on the diagram to show the path through the lens and on the other side of the lens. Explain your reasoning.

(continued on other side)

