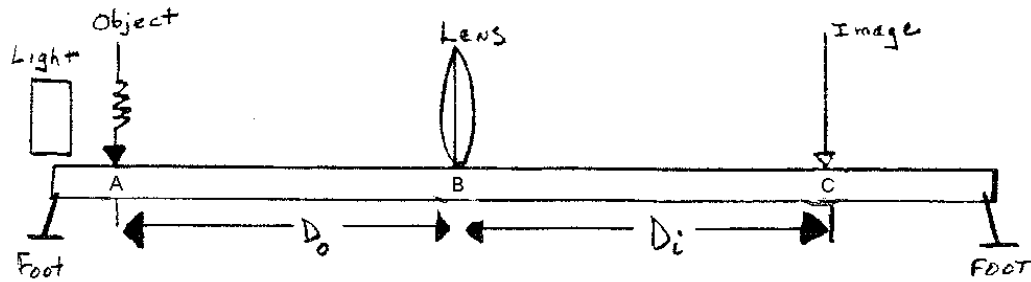


Iona Prep Physics

To measure the Focal Length of a Convex Lens



Procedure:

Set up the “Optical Bench” using the meter stick, feet, and optical parts as indicated. With the room lighting subdued, move the lens along the meter stick until the image is in focus on the image card. Record the locations of the object (A), lens (B) and image (C). From those you will calculate the object distance (D_o) and image distance (D_i). You will probably find two places where works. Record your results in a table. Record the number engraved on the lens you are using.

Move the image card closer to the object and repeat the procedure for two more sets of readings. Move the image card closer still and record for a fifth and sixth set of readings.

For each set of readings, calculate the focal length of the lens. Tabulate your results. Find the average of the focal lengths. That is your conclusion.

Location of Object (A)	Location of Lens (B)	Location of Image (C)	Object Distance (cm)	Image Distance (cm)	Focal Length (cm)

Conclusion: The focal length of lens # _____ was found to be _____.