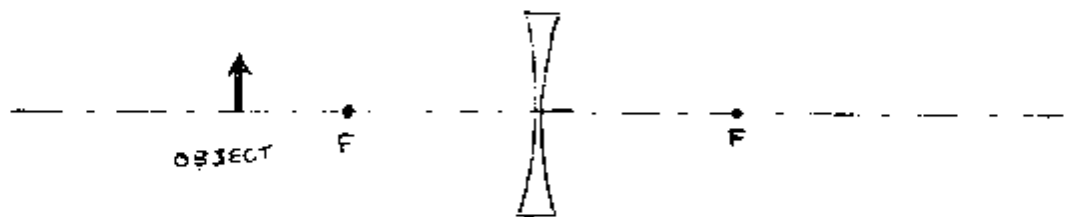


1. A fisherman is looking at a fish in a pond, as the diagram shows. Draw a reasonable path for light traveling from the fish to the man's eye.



2.



- (a) Complete the ray-tracing diagram for the diverging lens, as shown.
- (b) Is the image real or virtual?
- (c) If the object is 15 cm from the lens, and the focal length of the lens is -10 cm, calculate the position of the image.
- (d) Is there a position at which you could place the object to get a real image? If so, what position?