

Names

Group

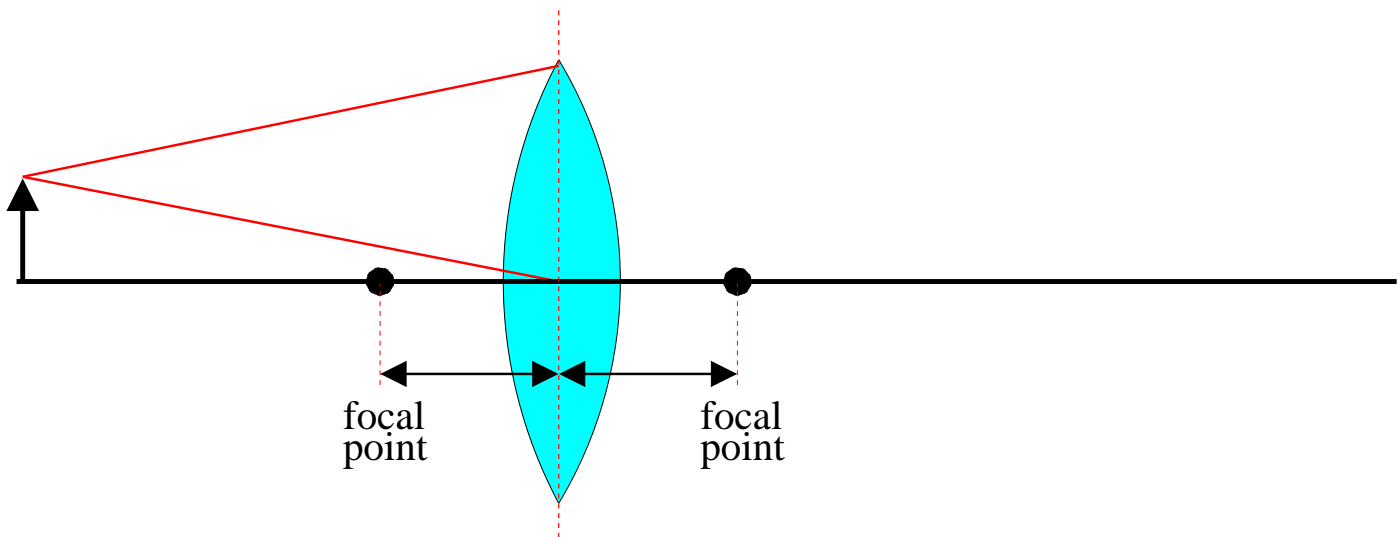
Question 1: Finding the image location

We have a lens, shown below, made of glass (the refractive index of glass is about 1.5). The magnitude of the focal length is $|f| = 15$ cm. The object is a distance 45 cm away.

- Is the focal length positive or negative?
- Where is the image located? Is it real or virtual? (i.e. find i).
- On the figure below, draw the principle rays to justify your answer to (b).

Question 2: Tracing the rays

Two light rays are coming off the top of the object. On the figure below, draw what happens to them as they pass through the lens.



Working for (a) and (b):

Answers for Q1a), Q1b):