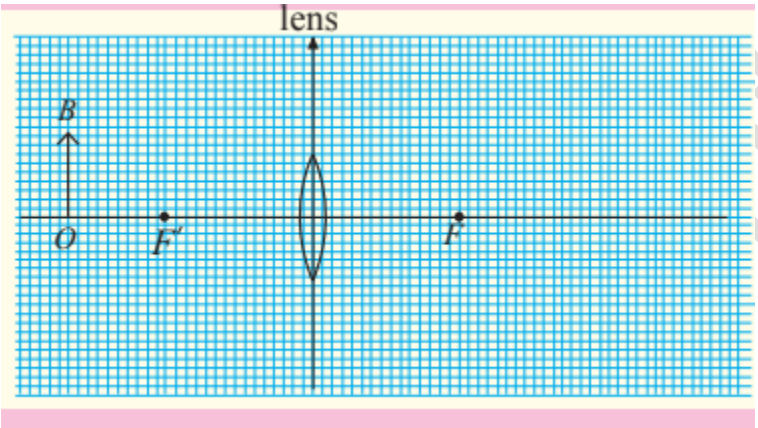
Wisdom Institute

- Answer the following questions and rename it with your index number.
- Upload your answers as a pdf file.

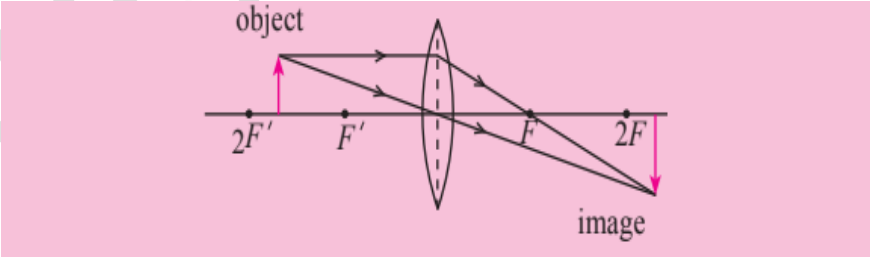
Convex Lens Activity 01

01. The figure shows an object OB in front of a convex lens. The two focal points are marked as F and F'. An image of OB will be formed on the right of the lens.



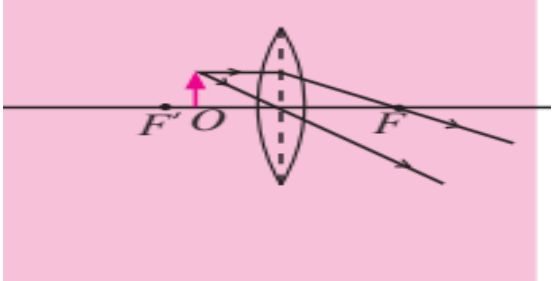
(a) Draw two rays from the top of the object (B), that pass through the lens and reach the image.
(b) Draw the image formed and label it as I.
(c) Calculate the ratio of the image size to the object size.

02. The diagram shows a convex lens forming a real image of an object.



State two changes that occur to the image when the object is moved towards F.

03. The diagram shows an object placed at O, in front of a convex lens. Focal length of the lens is 30 mm O is 20 mm from center of lens and the object is 15 mm high.



(a) By drawing this diagram to a suitable scale find the position of the image.
(b) State two properties of the image.
(c) By measuring the heights of the image and the object, find the ratio of their heights.