

SUBJECT:- PHYSICS

CLASS:- XTH

DATE:29/06/XX

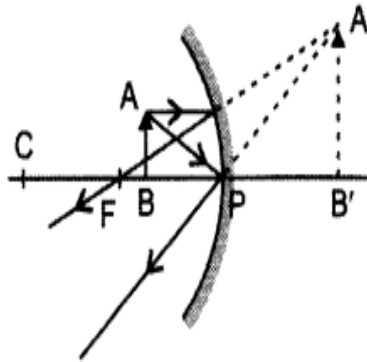
SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 4. (LIGHT)

1. What is the minimum number of rays required for locating the image formed by a concave mirror for an object. Draw a ray diagram to show the formation of a virtual image by a concave mirror. [Delhi]

Answer.

Two rays.



2. Explain why a ray of light passing through the centre of curvature of a concave mirror, gets reflected along the same path. [Delhi]

Answer. The ray passing through the centre of curvature incident to the mirror along its normal so $\angle i = \angle r = 0$. Therefore, the ray retraces its path.

3.. What is the nature of the image formed by a concave mirror if the magnification produced by the mirror is +3?

Answer. Positive sign of magnification indicates that image is virtual, erect and enlarged.

30. Between which two points of a concave mirror should an object be placed to obtain a magnification of -3?

Answer. Negative sign of magnification indicates that image is real and inverted. Also size of image is enlarged. So, object must be positioned between F and 2F, i.e.