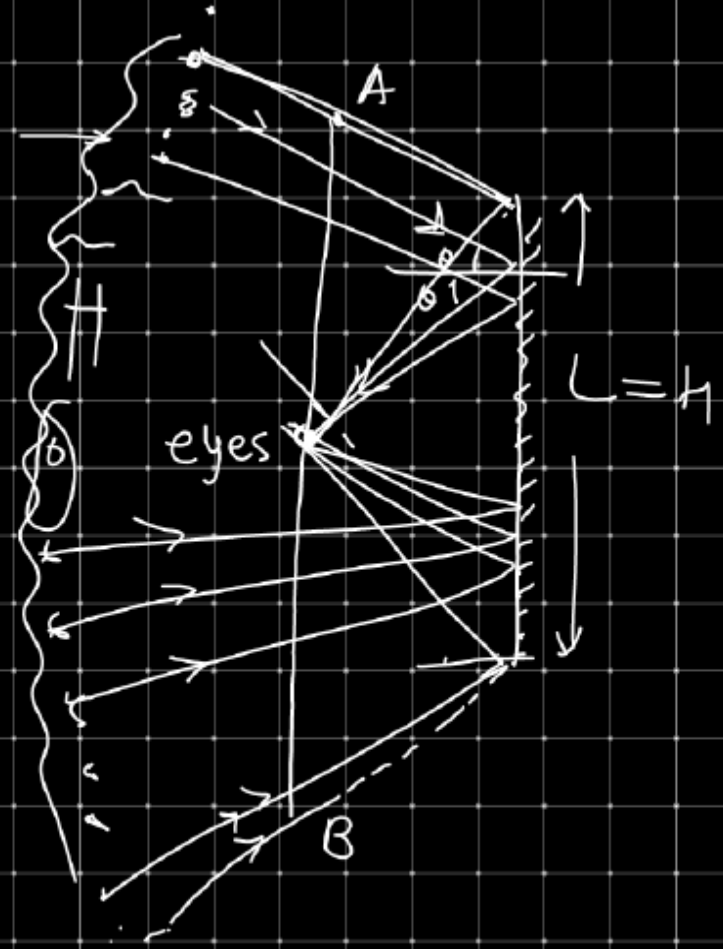
OPTICS

FIELD OF VIEW →

→ Visible length

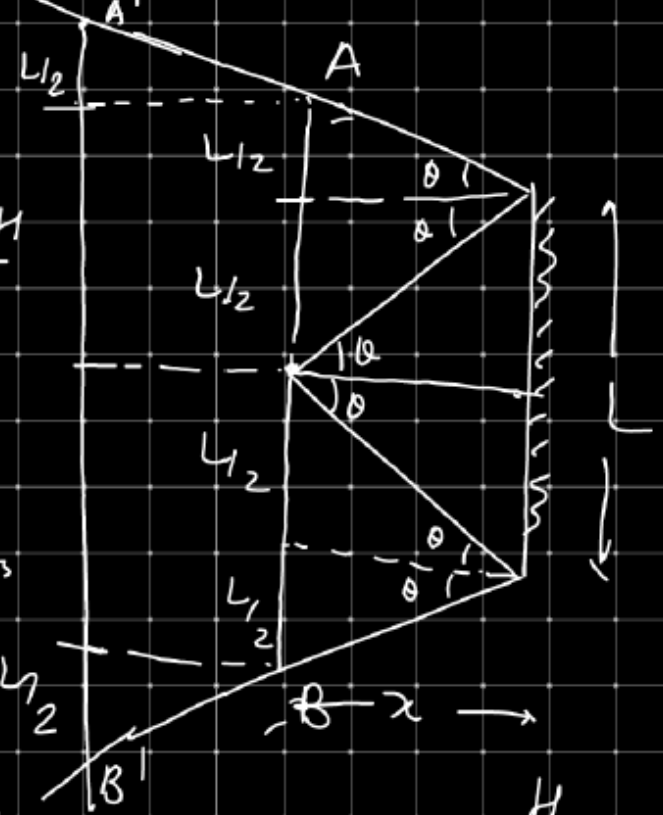
AB =



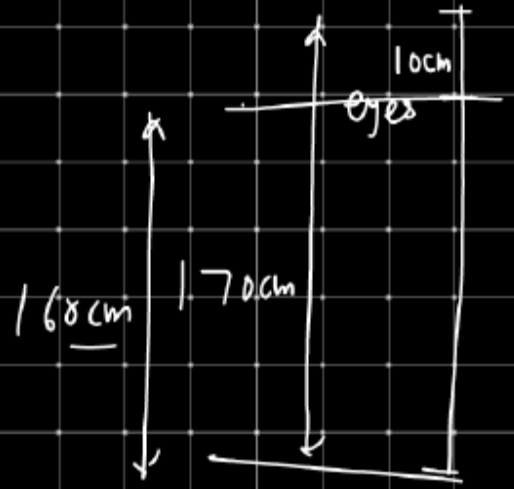
→ VISIBLE LENGTH

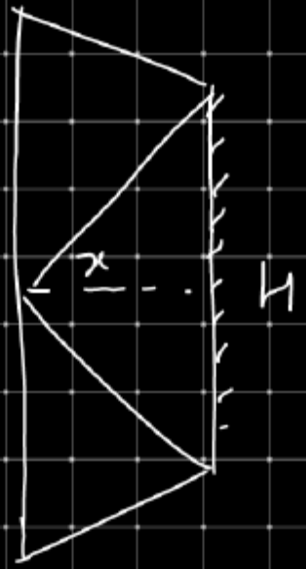
$AB = 2L$

→ $A'B' = 3L$



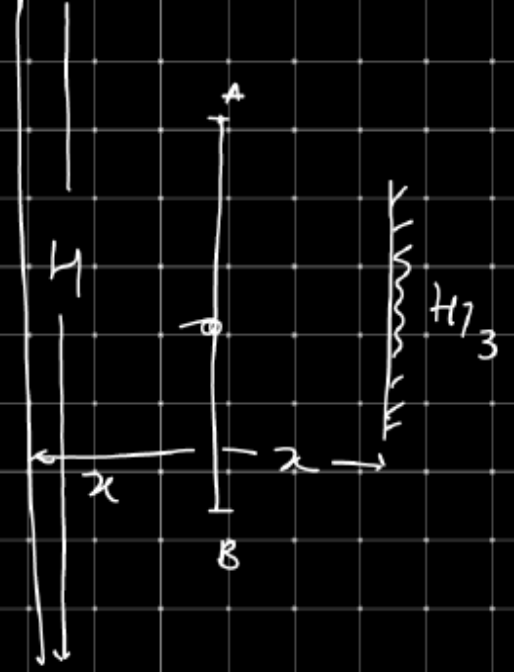
If a man wants to see full height H in a mirror then minimum height of mirror $= H/2$





$$H_{min} = \frac{170}{2} = 85\,cm$$

Q A man standing at mid of a room wants to see full image of backside wall in a mirror fitted in front wall then minimum height of mirror =?

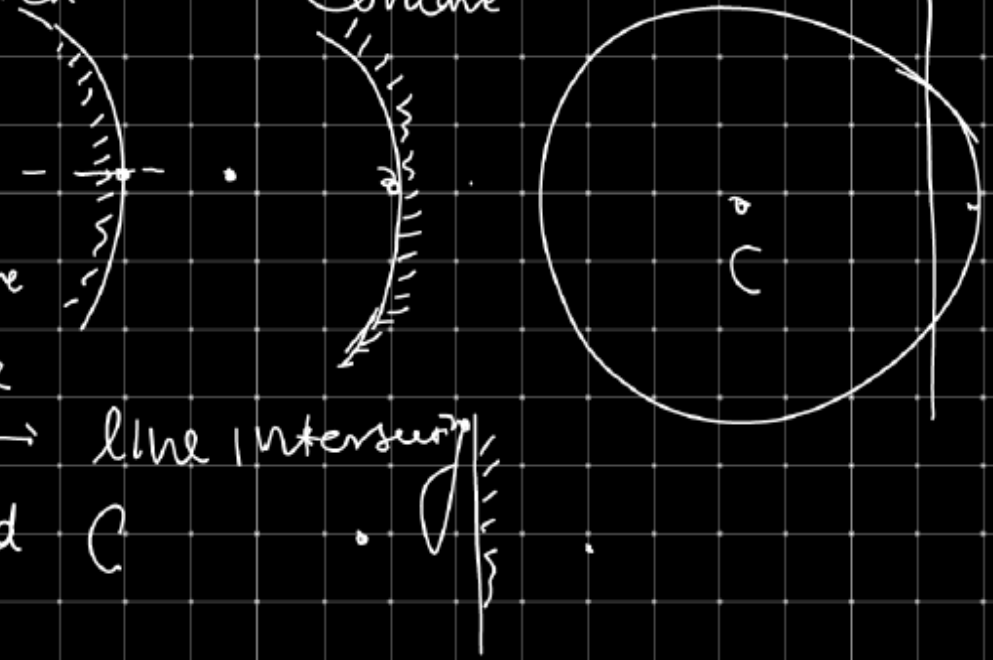


→ CURVED MIRROR →

Two types

Convex

Concave



→ Definitions →

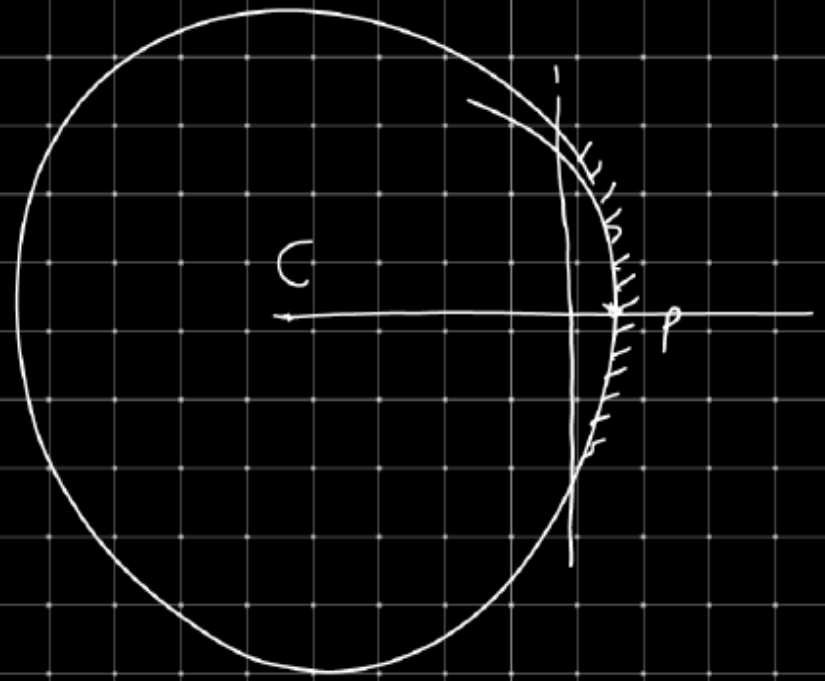
① pole → Centre

point is pole

② principle axis → line intersecting P and C

3. Centre of curvature

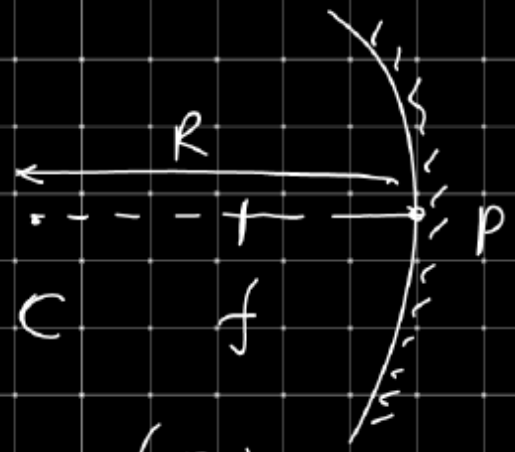
It is hypothetical centre of a mirror part



Centre of curvature →

④ FOCUS (f)

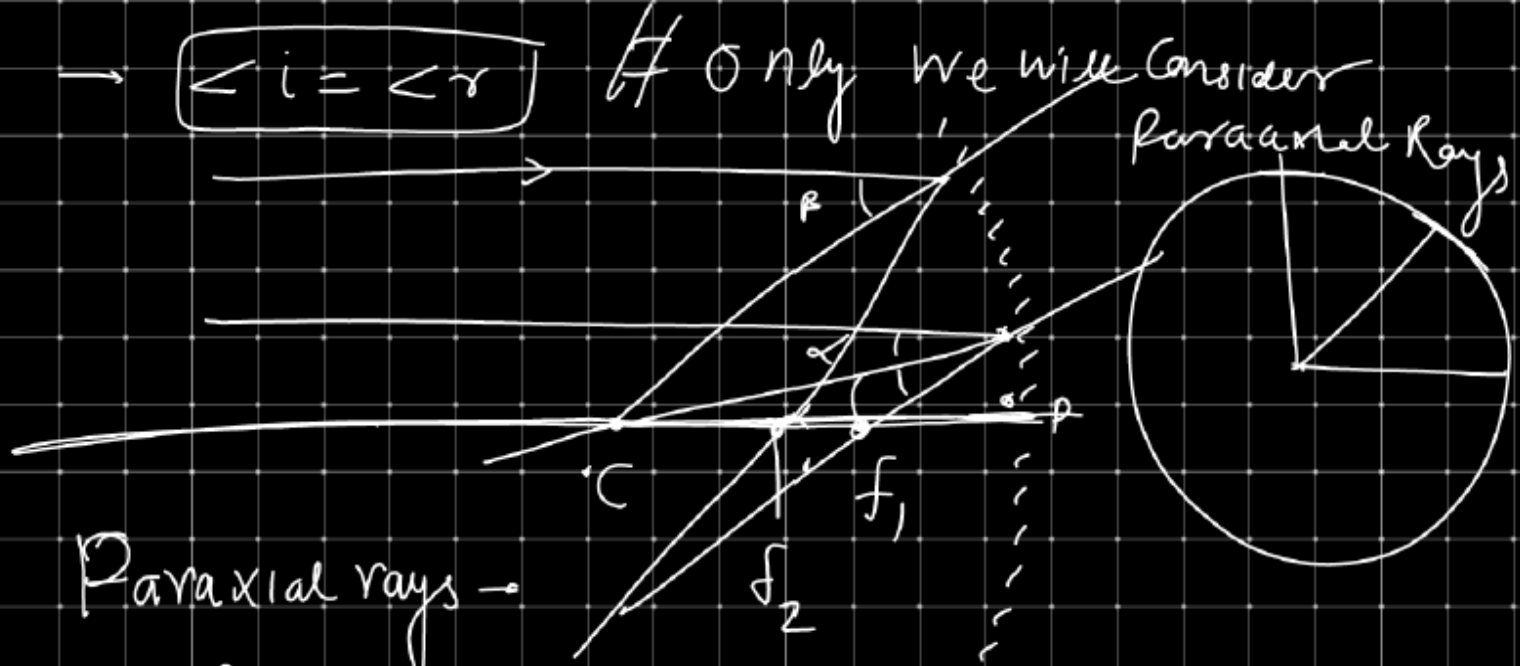
$$\boxed{f = R/2}$$



⑤ Radius of curvature (R)

Distance betn C and P

→ $\boxed{\angle i = \angle r}$ # Only we will consider Paraxial Rays



→ Paraxial rays → Ray near the principle axis

→ Marginal rays → Rays away from optical axis