

14/12/2020  
MONDAY

## PHYSICS

STD-8

class-36

### Assignment

- An object is placed in front of a concave mirror 40 cm away from it. If its focal length is 80 cm, locate the position of the image and find the nature of the image.

Ans)

$$u = -40 \text{ cm} \quad f = -80 \text{ cm} \quad v = ?$$

$$\begin{aligned} v &= \frac{uf}{u+f} = \frac{-40 \times -80}{-40 + -80} \\ &= \frac{3200}{-40} \\ &= \underline{\underline{-80}} \end{aligned}$$

So the image is in front of the mirror  
it is real and inverted.