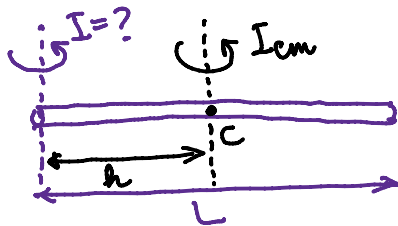


$$\checkmark I = I_{cm} + M \cdot h^2$$

Ex1:



$$I_{cm} = \frac{ML^2}{12}$$

$$h = L/2$$

$$I = I_{cm} + Mh^2$$

$$I = \frac{ML^2}{12} + M\left(\frac{L}{2}\right)^2$$

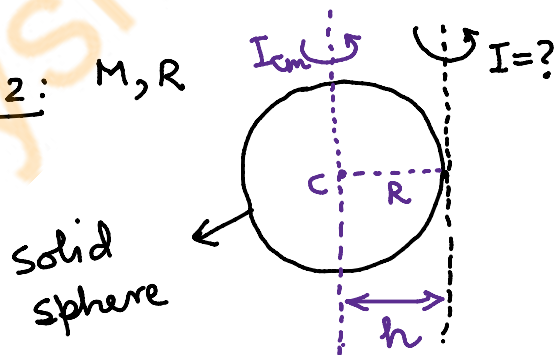
$$I = \frac{ML^2}{12} + \frac{ML^2}{4} = ML^2\left(\frac{1}{12} + \frac{1}{4}\right)$$

$$= ML^2\left(\frac{1+3}{12}\right)$$

$$= ML^2 \cdot \frac{4}{12}$$

$$I = \frac{ML^2}{3}$$

Ex2: M, R



$$I_{cm} = \frac{2}{5} MR^2$$

$$h = R$$

$$I = I_{cm} + Mh^2$$

$$= \frac{2}{5} MR^2 + MR^2$$