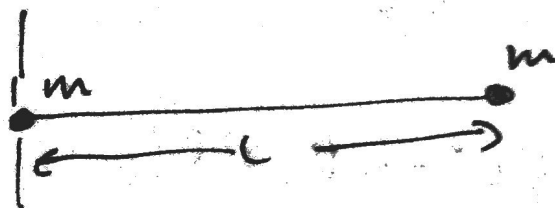


ROTATIONAL INERTIA



$$\begin{aligned} \text{a) } I_{\text{com}} &= \sum m_i r_i^2 \\ &= m \left(\frac{L}{2} \right)^2 + m \left(\frac{L}{2} \right)^2 \\ &= \frac{1}{2} m L^2 \end{aligned}$$

$$I = m_1 r_1^2 + m_2 r_2^2$$



$$\begin{aligned} \text{b) } I &= \sum m_i r_i^2 \\ &= m(0)^2 + m(L)^2 \\ &= m L^2 \end{aligned}$$