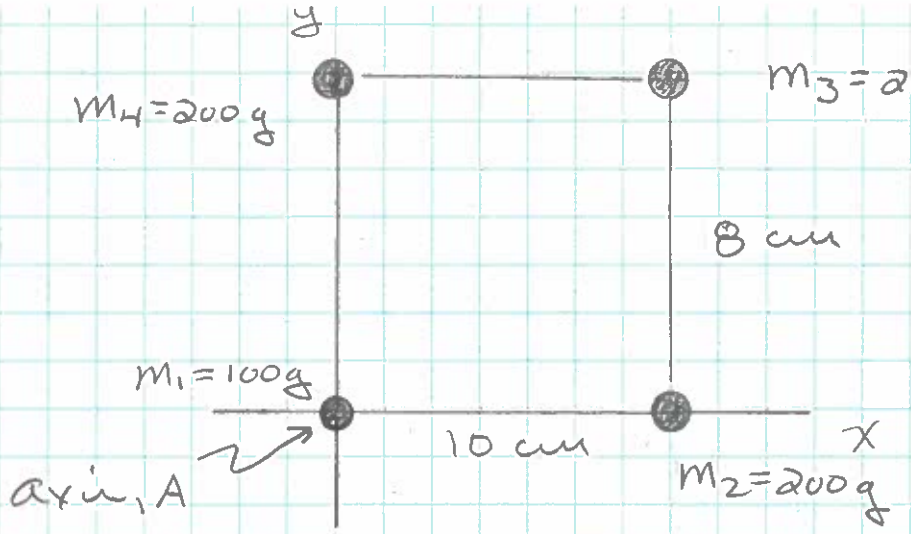

Moment of Inertia about A:

$$I_A = \sum_{i=1}^{4} m_i r_i^2$$

$r_1 = 0$, $r_2 = 0.1\,m$, $r_3 = \sqrt{(.1)^2 + (.08)^2} = 0.128\,m$

$r_4 = 0.08$

So:

$$I_A = m_1(0)^2 + m_2(.1)^2 + m_3(0.128)^2 + m_4(.08)^2$$

$$= 0.0066\ kg\,m^2$$