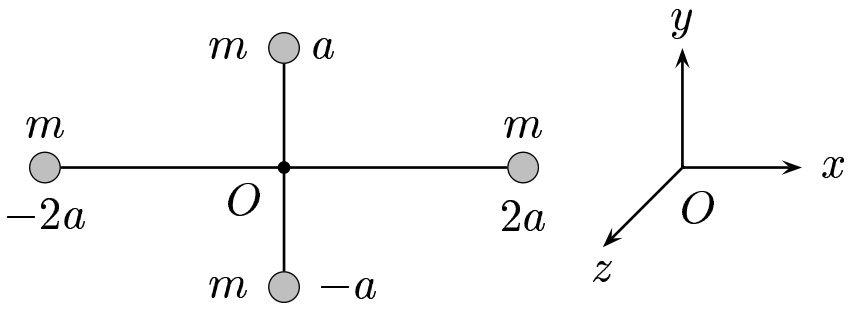
Given: Four identical masses in the xy plane and z is coming out of the paper.



Find I_x.

A) $I_x = m\,a^2$.

B) $I_x = 2\,m\,a^2$.

C) $I_x = 8\,m\,a^2$.

The masses on the x-axis do not contribute since $z = 0$.

$$I_x = m\,a^2 + m\,a^2$$

$$= 2\,m\,a^2\,.$$

Answer **B**.

10.04-01˙Moment˙of˙Inertia 2006-9-14