$$\mathrm{I}_{xx} = \sum_i m_i \left(y_i^2 + z_i^2 \right), \qquad \mathrm{I}_{yy} = \sum_i m_i \left(x_i^2 + z_i^2 \right), \qquad \mathrm{I}_{zz} = \sum_i m_i \left(x_i^2 + y_i^2 \right).$$