$$X_{c.m.} = \frac{\sum_i m_i x_i}{\sum_i m_i}, \qquad Y_{c.m.} = \frac{\sum_i m_i y_i}{\sum_i m_i}, \qquad Z_{c.m.} = \frac{\sum_i m_i z_i}{\sum_i m_i}.$$