1. **Play with the simulation:** https://books.physics.oregonstate.edu/GCF/rcm.html
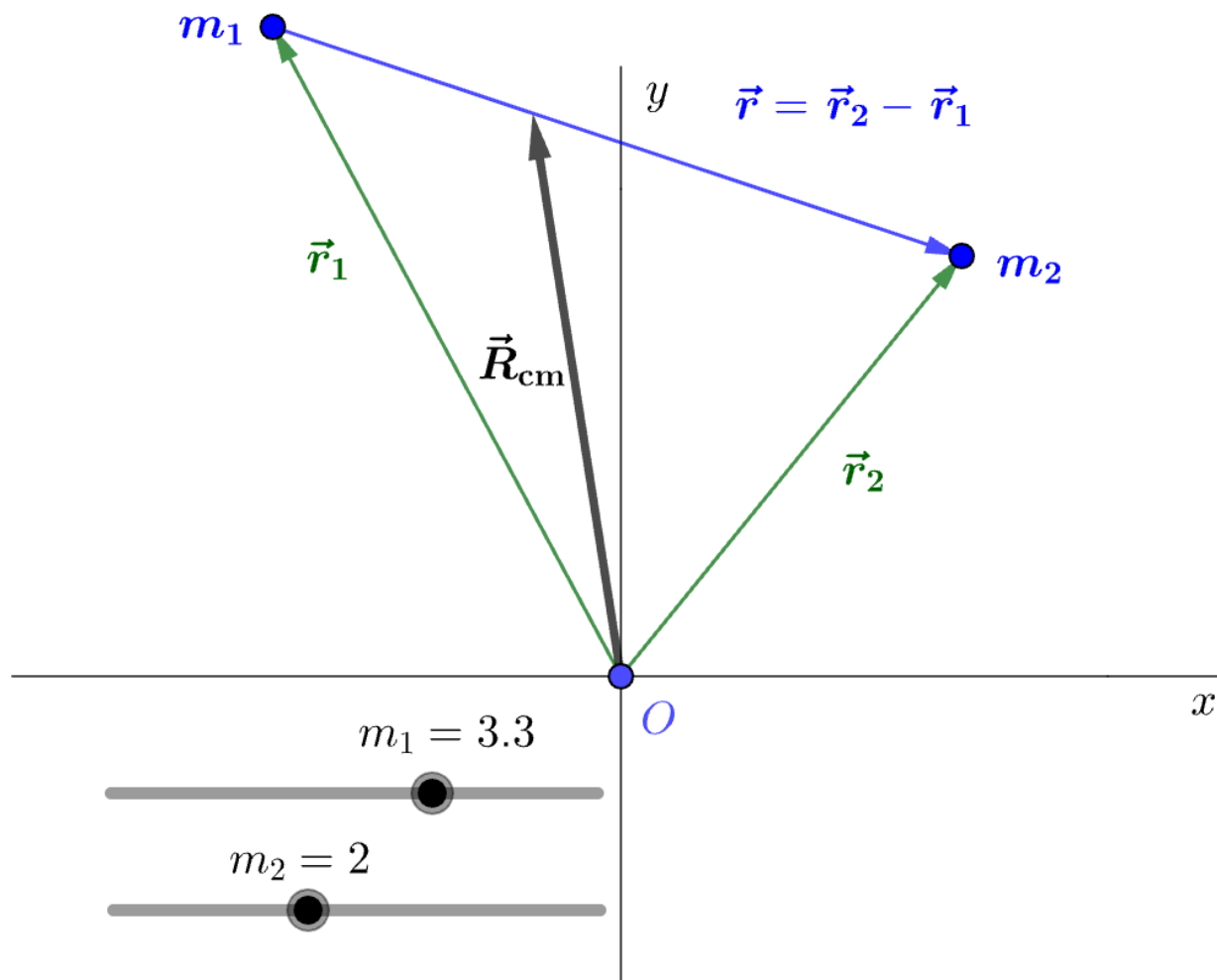
   - What happens if $m_1 = m_2$, how about $m_1 = 0$ or $m_2 = 0$?

   - What happens if you move m_1 and m_2 ?

   - What happens if you move the origin? (How does changing the origin affect the vector diagram? What stays the same?)

2. Based on the graph, how can you draw or describe the position of m_1 in terms of $\vec{R}_{\text{cm}}$ and another vector?

3. Based on the graph, how can you draw or describe the position of m_2 in terms of $\vec{R}_{\text{cm}}$ and another vector?