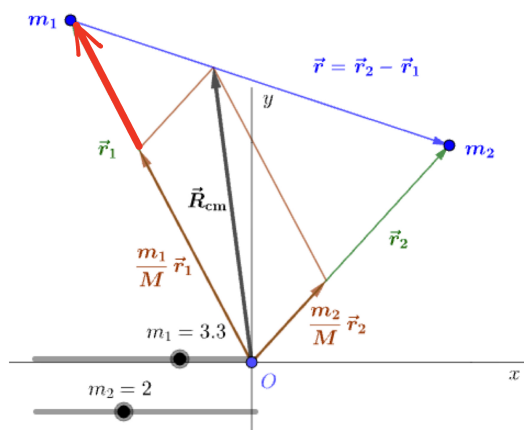
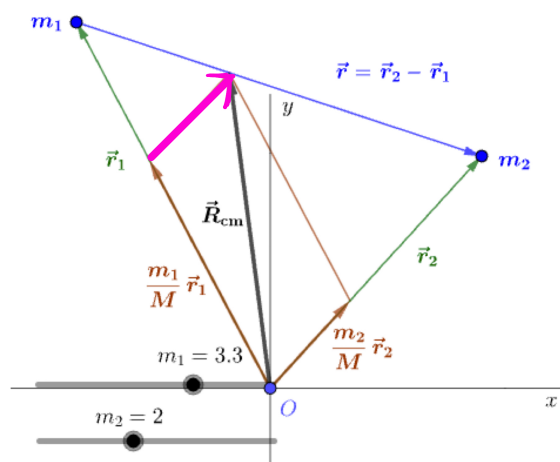


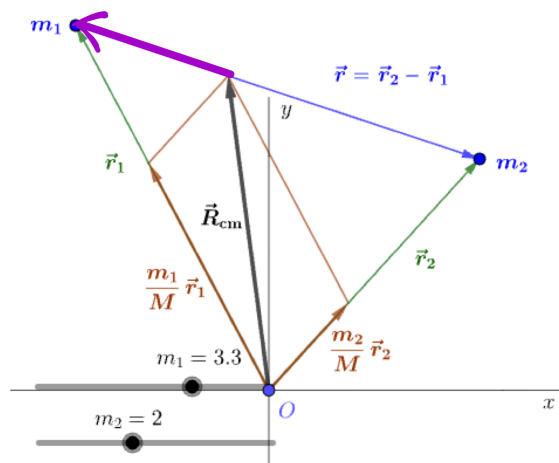
1. **Play with the simulation:** <https://books.physics.oregonstate.edu/GCF/rmass.html>
2. How to represent the RED vector algebraically?



3. How to represent the PINK vector algebraically?



4. How to represent the PURPLE vector algebraically?



5. How can you represent $\vec{r}_1$ algebraically in terms of the vectors $\vec{R}_{\text{cm}}$ and $\vec{r}$?
6. Using a similar method, how can you represent $\vec{r}_2$ algebraically in terms of the vectors $\vec{R}_{\text{cm}}$ and $\vec{r}$?