1. Find the location of the center-of-mass of the Earth-moon system. Why is it located inside Earth?

2. A tennis racket is tossed in the air and lands a few meters away from the person that tossed it. It spins around a few times before hitting the ground. Sketch the motion of the tennis racket and explain your sketch.

3. The system shown at the right contains three equal point masses. Find the center-of-mass of the system. Indicate this location in the sketch and then explain why your answer is about correct.

4. Find the center-of-mass of an equilateral triangle with sides of length ℓ.