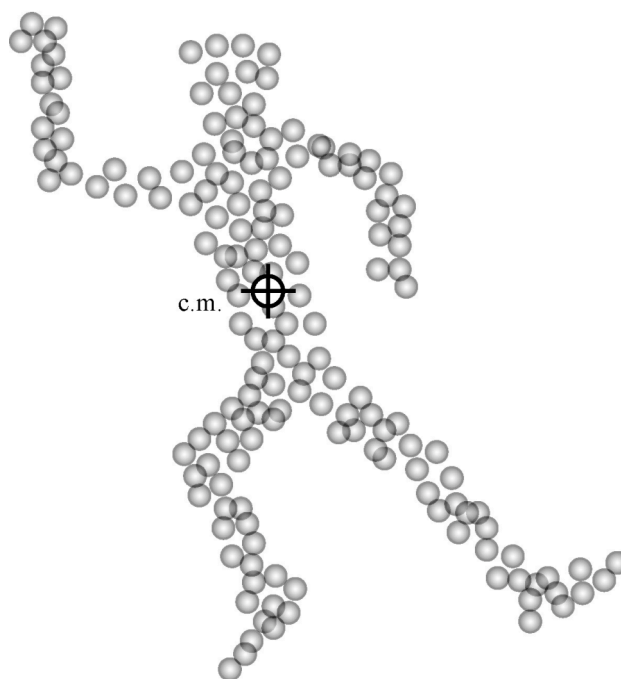
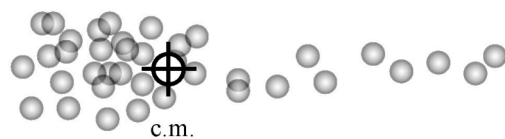
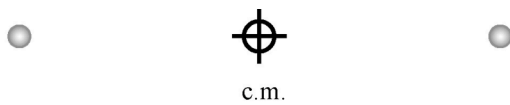


CENTER OF MASS

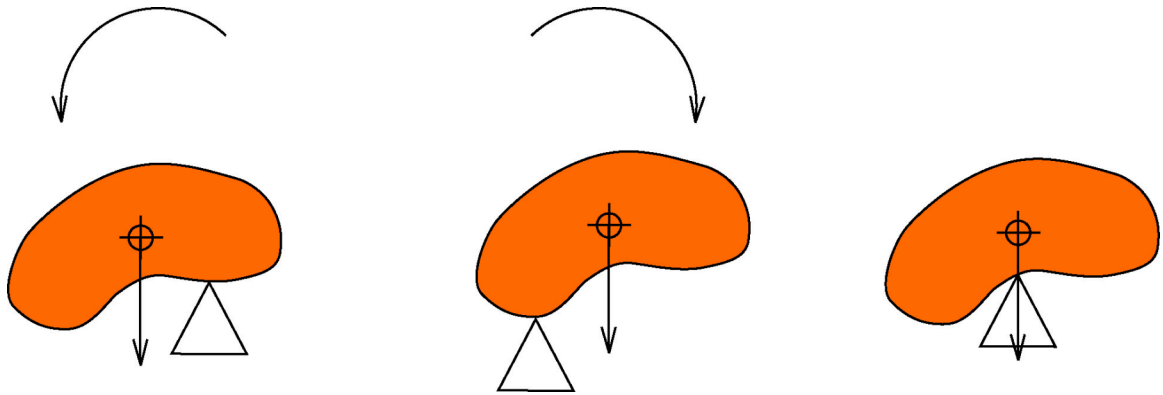
Center of mass (or center of gravity) = average location of the total mass of the body.



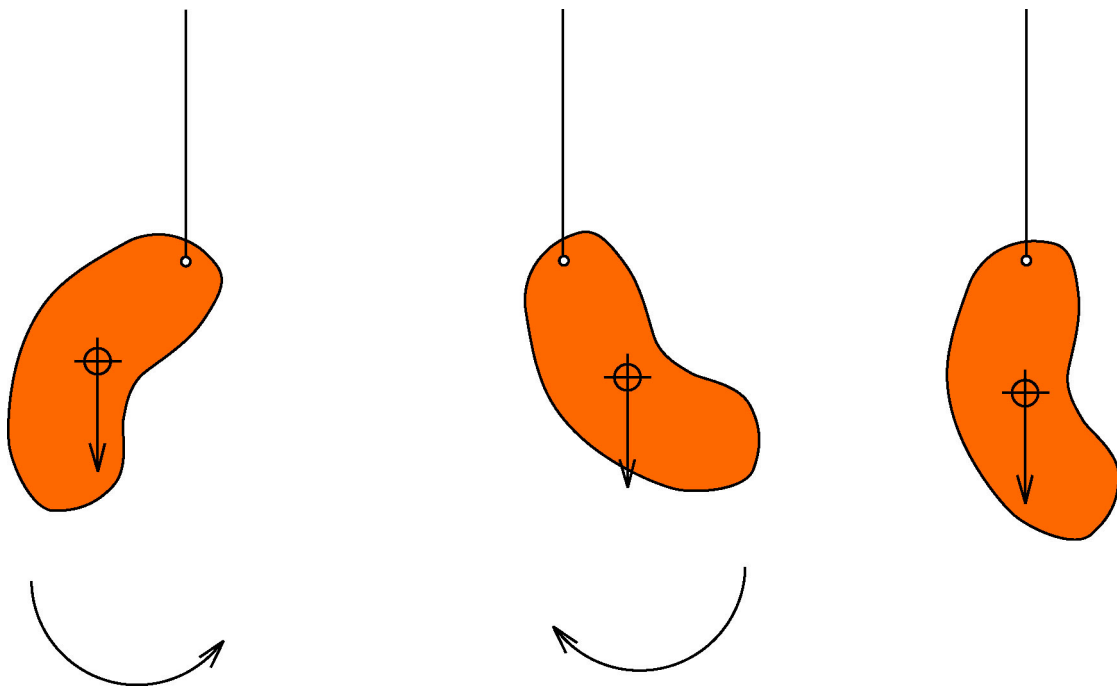
The weight force is applied at the center of mass, so center of mass = “center of gravity”.

Location of the c.m.

Balance method:



Suspension method:



Location of c.m. of a person

Reaction board method: Next lab.

Mathematical model method (or segmentation method): Next lab

Some important points

- The c.m. is not fixed to any given part of the body.
- The c.m. does not have to be within the material of the body.

In airborne motions:

If one part of the body goes up, another must come down as a compensation.

