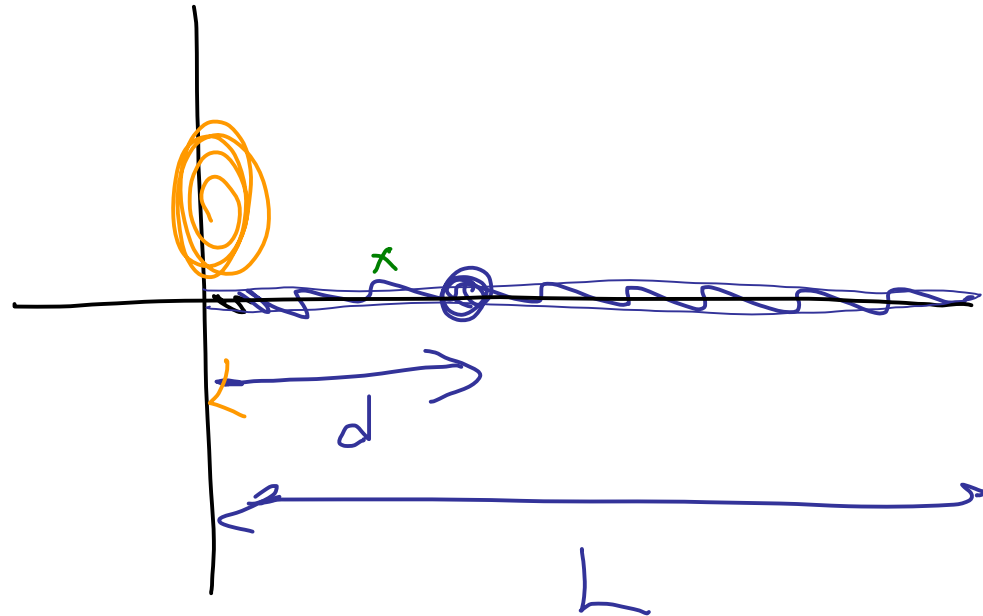


Chap 9 ...

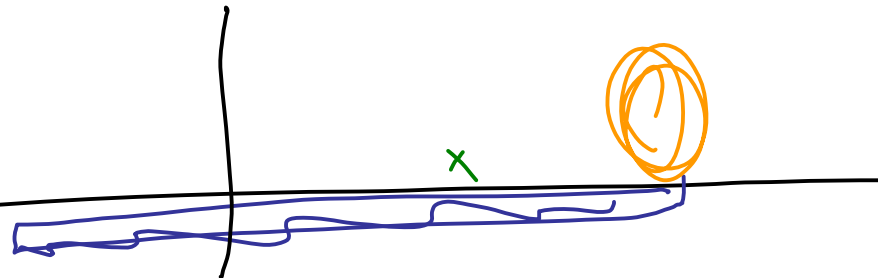
CM

Principle

CM doesn't move



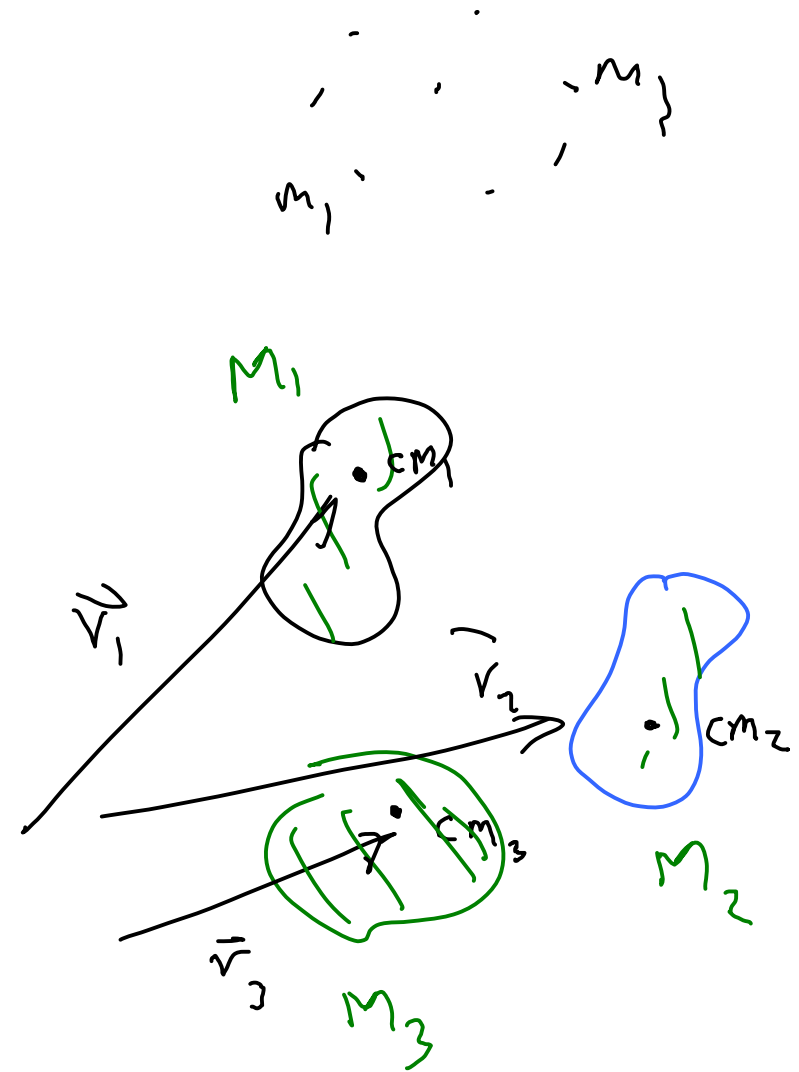
$$\vec{F}_{\text{ext net}} = M \vec{a}_{\text{cm}}$$



Theorem about CM:

$$\vec{r}_{cm} = \frac{\sum m_i \vec{r}_i}{M}$$

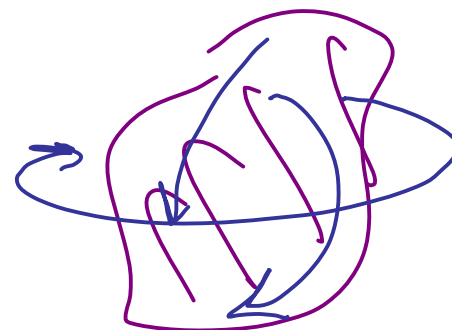
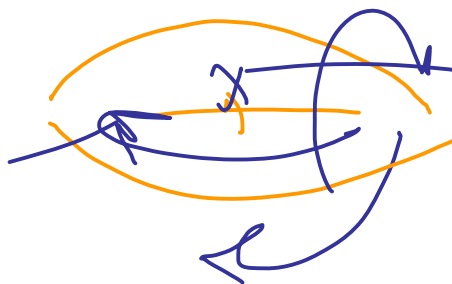
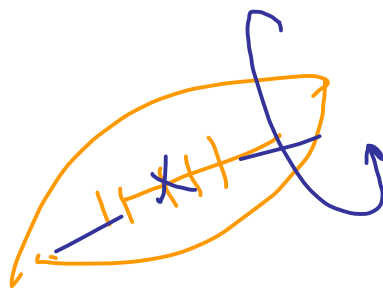
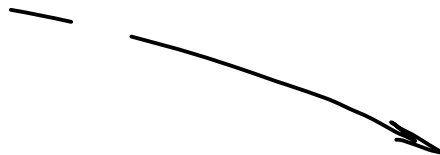
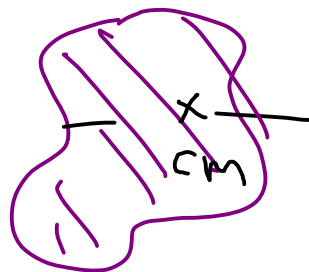
$$\vec{r}_{cm} = \frac{M_1 \vec{r}_1 + M_2 \vec{r}_2 + M_3 \vec{r}_3}{M_1 + M_2 + M_3}$$



Chap 10

Rigid
bodies

Rotations



Rotations

Description:

Angle \odot .

Radians

$$180 \text{ deg} = \pi \text{ rad}$$

\odot can be pos or neg

Scalar (radians)

