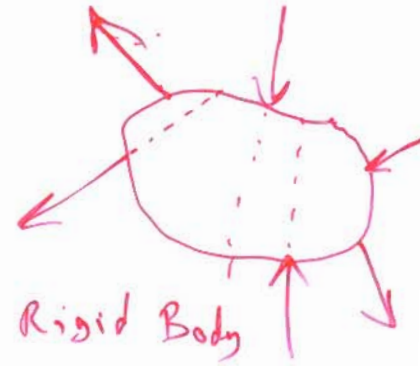
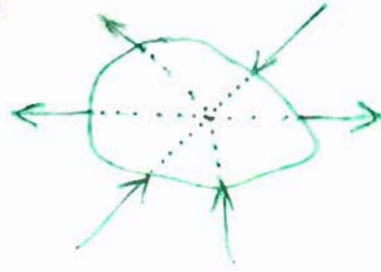


Moment of a Force

Scalar Formulation

* Particle vs. Rigid Body

→ Particle



Rigid body ⇒ Forces do not meet at one point

⇒ Body has a tendency to rotate.

⇒ Moment

Moment : Scalar Formulation

Moment = Force \times Arm

$$M_p = F * d$$

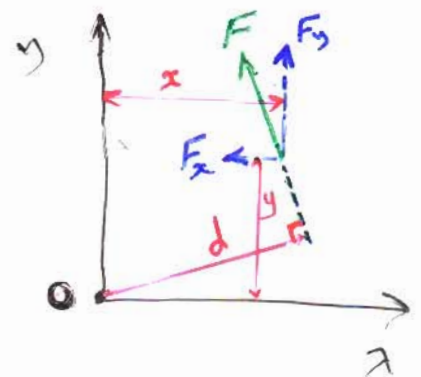
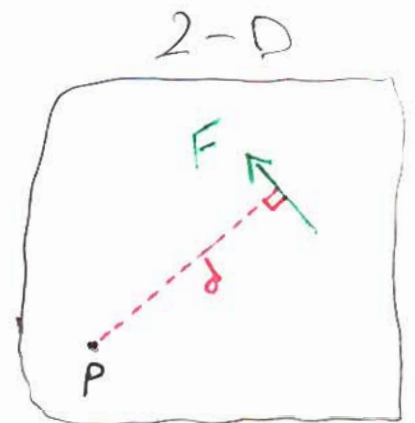
d is \perp to the

line of action of \underline{F} .

$$M_o = F d$$

$$= F_x y + F_y x$$

M is about z (o), axis



counterclockwise ccw
 \oplus

cw
 \ominus

clockwise