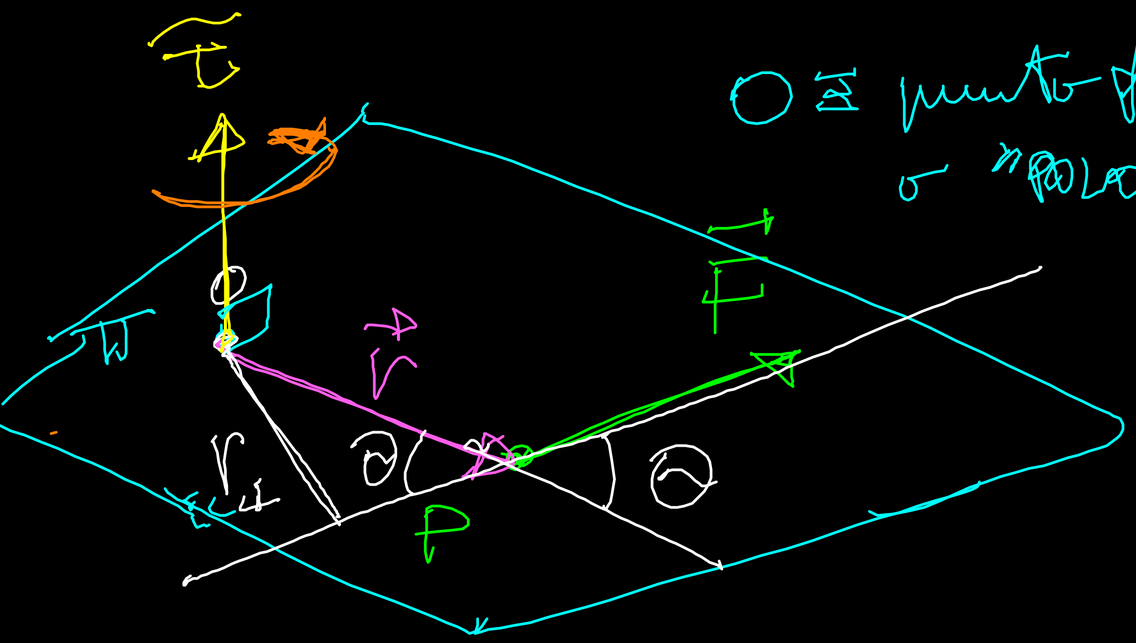
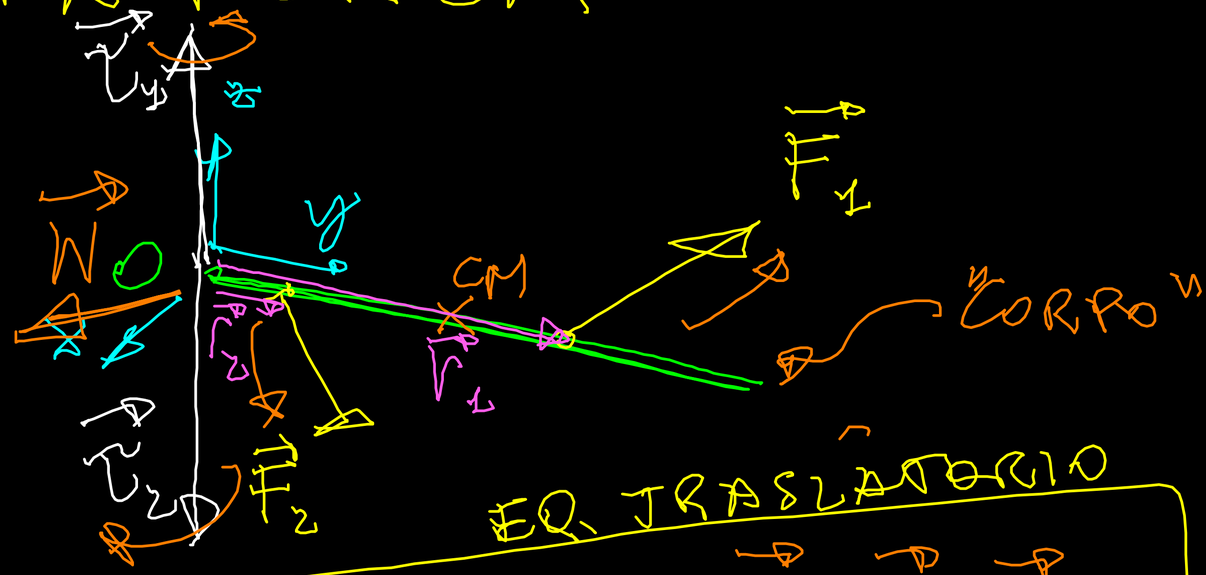
MOMENTO DI UNA FORZA



Momento di $\vec{F}$ rispetto ad "O"

$$\vec{\tau} = \vec{r} \times \vec{F}$$

$$|\vec{\tau}| = r F \sin\theta = r_\perp F$$



EQ. TRASLATORIO

$$\sum \vec{F}_{ext} = 0 \Rightarrow \vec{F}_1 + \vec{F}_2 + \vec{N} = 0$$

$$\vec{r}_1 \times \vec{F}_1 + \vec{r}_2 \times \vec{F}_2 = 0$$

$$\vec{\tau}_y + \vec{\tau}_2 = 0$$

$$\sum \vec{\tau}_{ext_O} = 0$$

EQ. ROTATORIO

EQUILIBRIO STATICO DI UN CORPO RIGIDO

$$\sum \vec{F}_{ext} = 0$$

EQ. TRASLATORIO

"AND"

$$\sum \vec{\tau}_{ext,O} = 0$$

EQ. ROTATORIO

ESEMPI

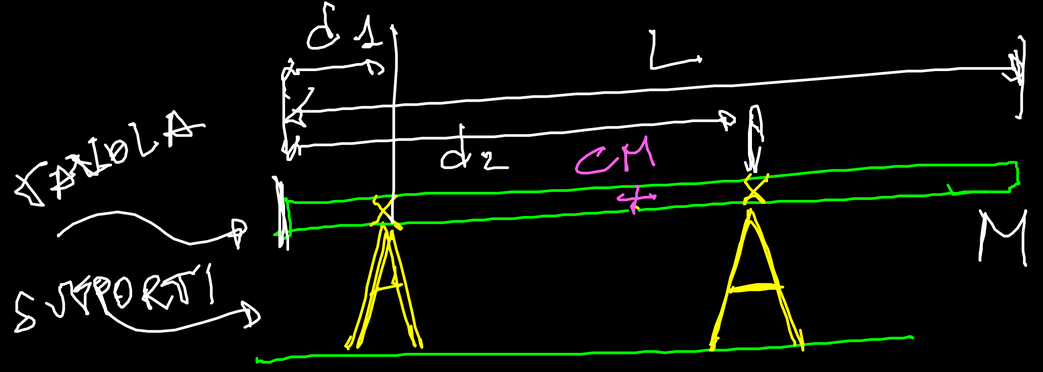
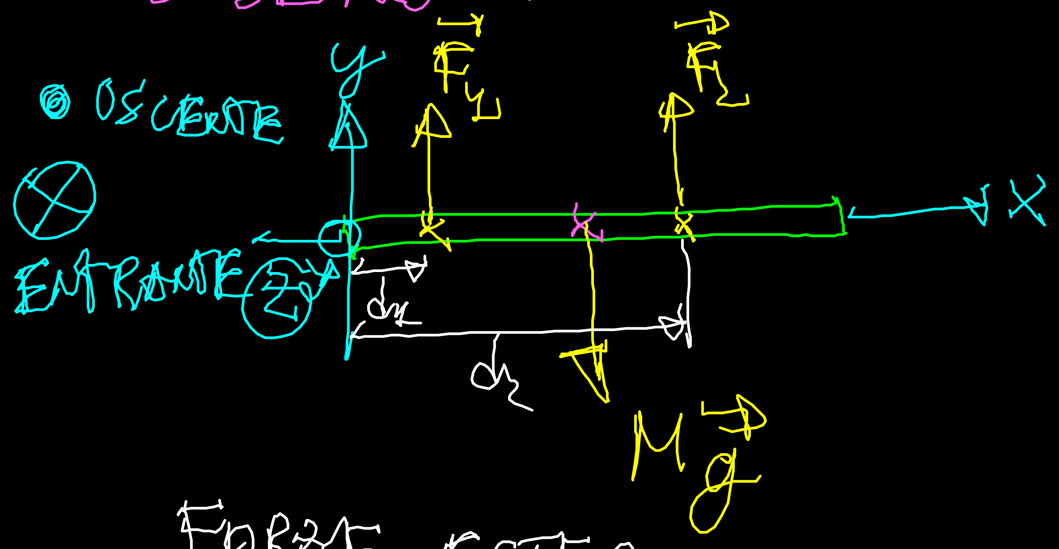


DIAGRAMMA DI CORPO LIBERO DELLA TAVOLA



FORZE ESTERNE

COND. DI EQ.

(TR.) $\vec{F_1} + \vec{F_2} + M\vec{g} = 0$

(x) $0 = F_{1x} + F_{2x}$

(y) $F_{1y} + F_{2y} - M_g = 0$

(ROT.)