

$$1) \sum F_H = 0 \Rightarrow$$

$$H_3 - \frac{2 \text{ kN}}{\text{m}} \cdot 4 \text{ m} + 10 \text{ kN} = 0$$

$$H_3 = 2 \text{ kN}$$

$$2) \sum M_{[S_2]}^{A12} = 0 \Rightarrow$$

$$- \frac{2 \text{ kN}}{\text{m}} \cdot 4 \text{ m} \cdot 2 \text{ m} - 4 \text{ m} H_3 + 3 \text{ m} V_3$$

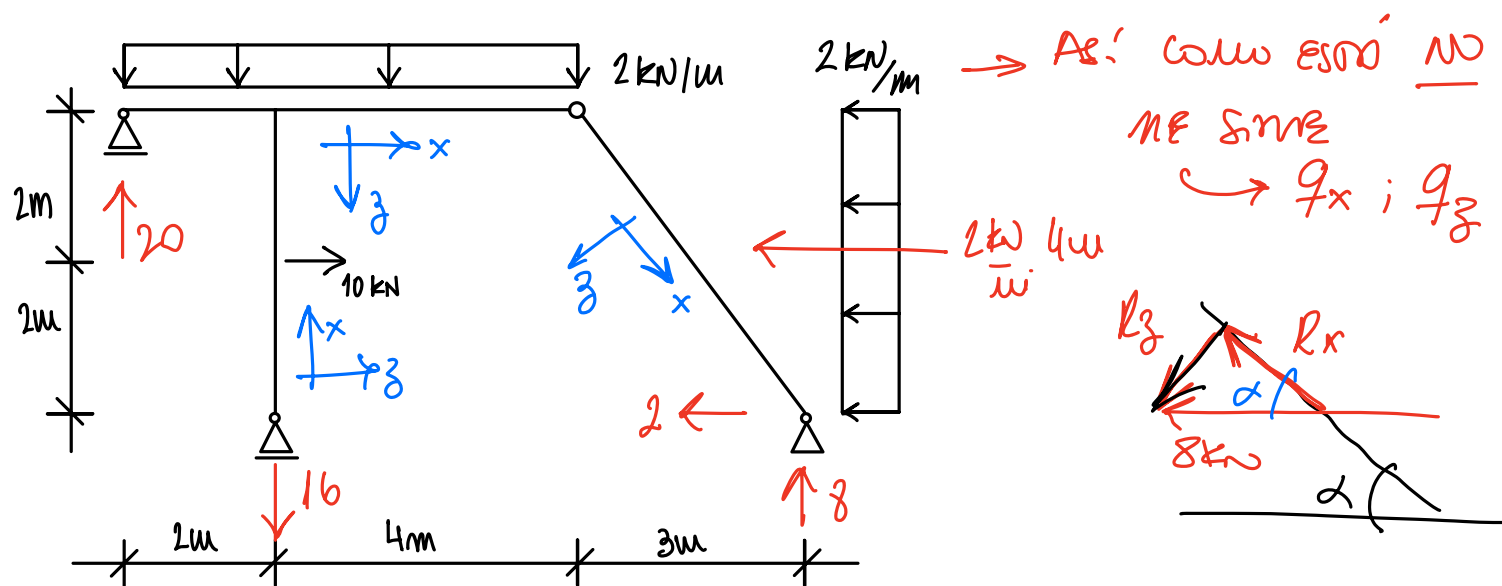
$$V_3 = 8 \text{ kN}$$

$$3) \sum M^1 = -2 \text{ m} V_2 + 2 \text{ m} 10 \text{ kN} - 6 \text{ m} \cdot \frac{2 \text{ kN}}{\text{m}} \cdot 3 \text{ m} - 4 \text{ m} H_3 - \frac{2 \text{ kN}}{\text{m}} \cdot 4 \text{ m} \cdot 2 \text{ m} + 9 \text{ m} V_3 = 0$$

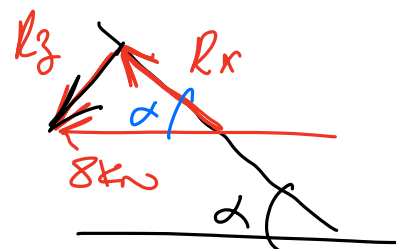
$$\Rightarrow V_2 = 16 \text{ kN}$$

$$4) \sum F_V = V_1 - V_2 + V_3 - \frac{2 \text{ kN}}{\text{m}} \cdot 6 \text{ m} = 0 \Rightarrow V_1 = 20 \text{ kN}$$

DIA GRAMA DE CORPO LÍQUIDO EQUILIBRADO.

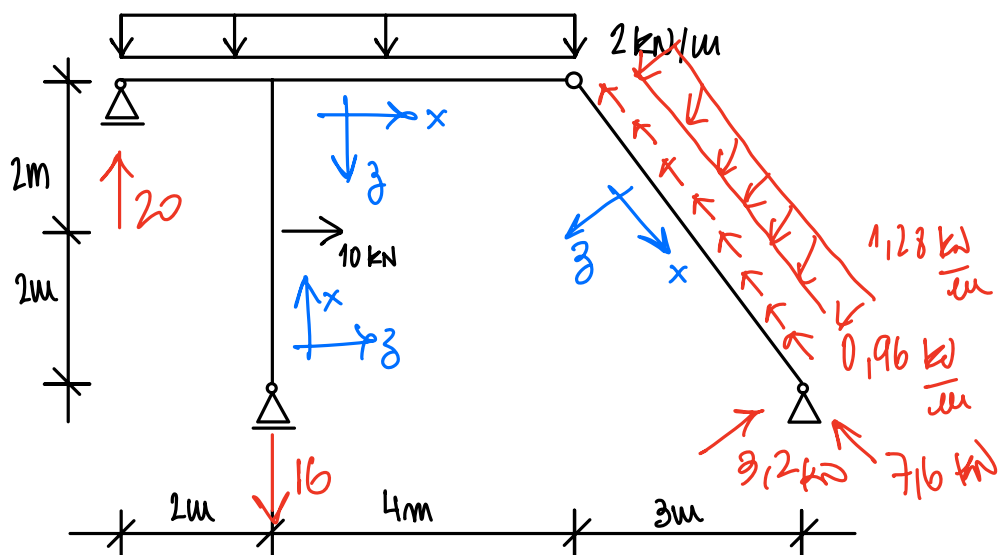


At: como está no
ME SINTE
→ q_x e q_z



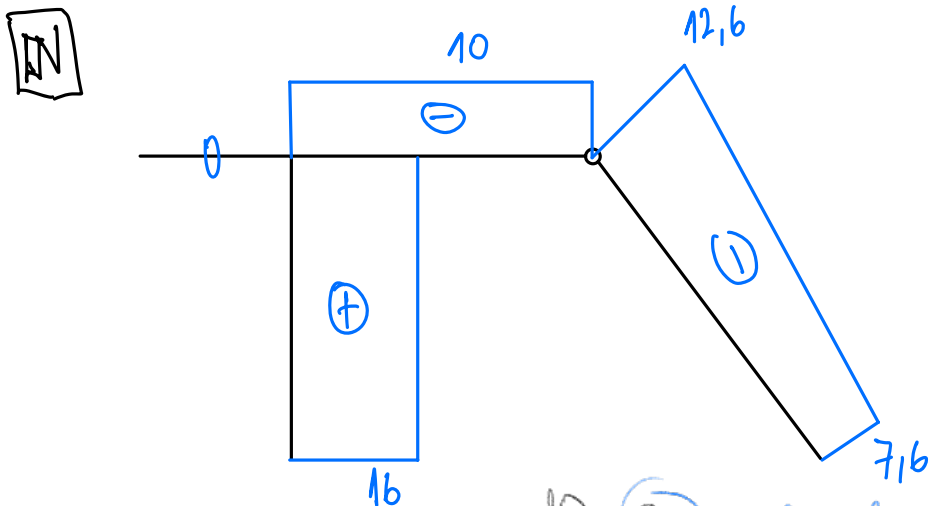
Busco los
cambios de
H y a la
barra

$$\left\{ \begin{array}{l} R_x = -R \cdot \cos(\alpha) \\ = -8 \text{ kN} \cdot \frac{3}{5} = -4,8 \text{ kN} \rightarrow q_x = \frac{R_x}{5 \text{ m}} = -0,96 \text{ kN/m} \\ R_z = R \cdot \sin(\alpha) \\ = 8 \text{ kN} \cdot \frac{4}{5} = 6,4 \text{ kN} \rightarrow q_z = \frac{R_z}{5 \text{ m}} = 1,28 \text{ kN/m} \end{array} \right.$$

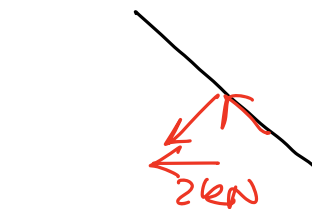
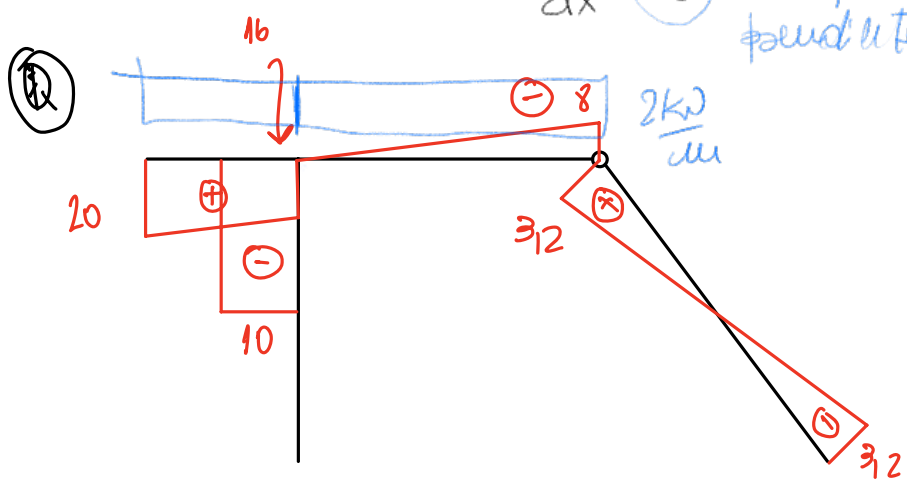


$$\frac{dN}{dx} = -q_x \rightarrow N \rightarrow \text{lineal}$$

$$\frac{dQ}{dx} = q_z \rightarrow Q \rightarrow \text{lineal}$$

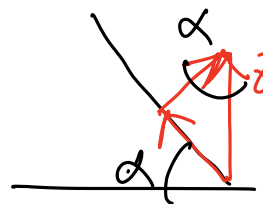


$$\frac{dQ}{dx} = q_z \text{ lo soy la pendiente}$$



$$x) - 2 \text{ kN} \cdot 0.6 = -1.2 \text{ kN}$$

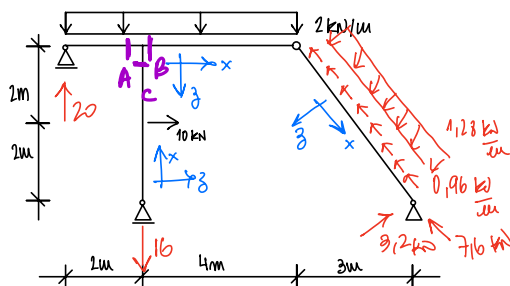
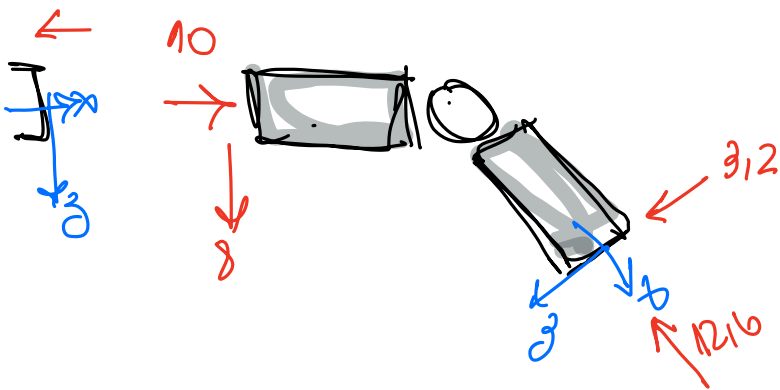
$$z) 2 \text{ kN} \cdot 0.8 = 1.6 \text{ kN}$$



$$x) - 8 \text{ kN} \cdot 0.8 = -6.4 \text{ kN}$$

$$z) - 8 \text{ kN} \cdot 0.6 = -4.8 \text{ kN}$$

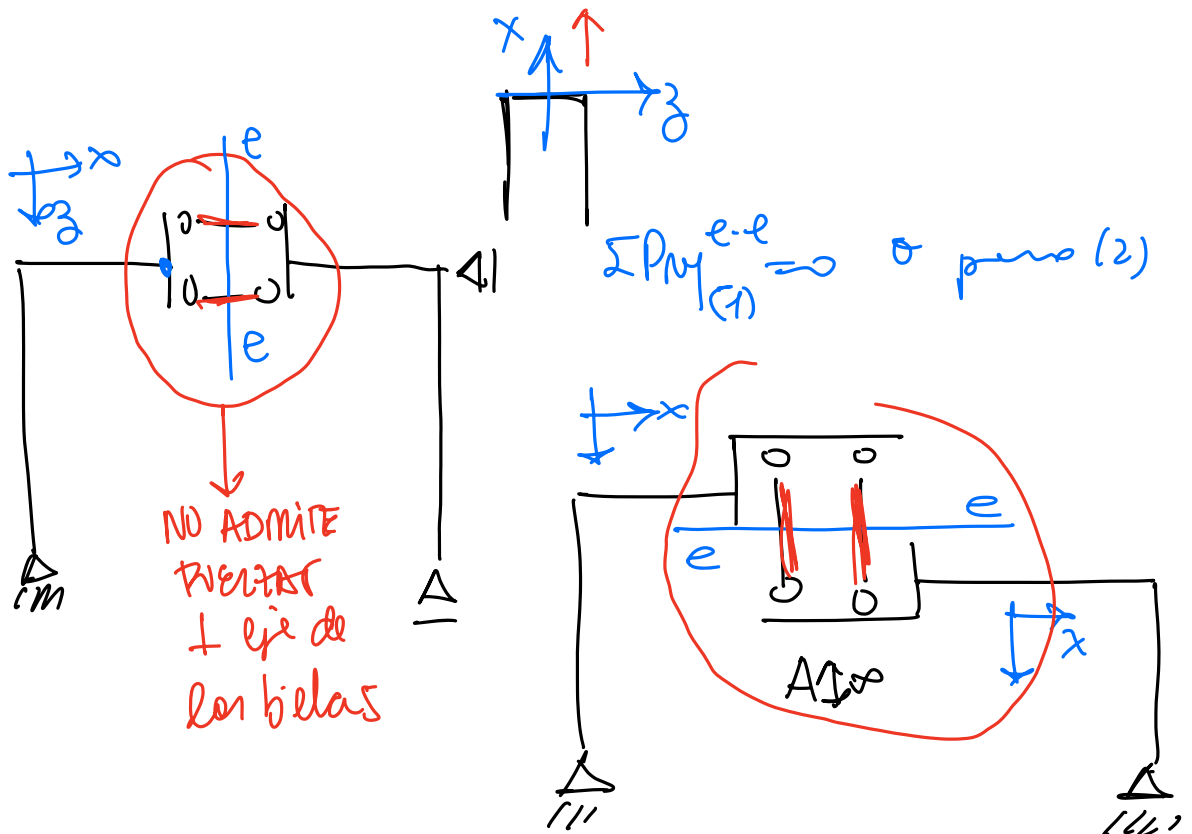
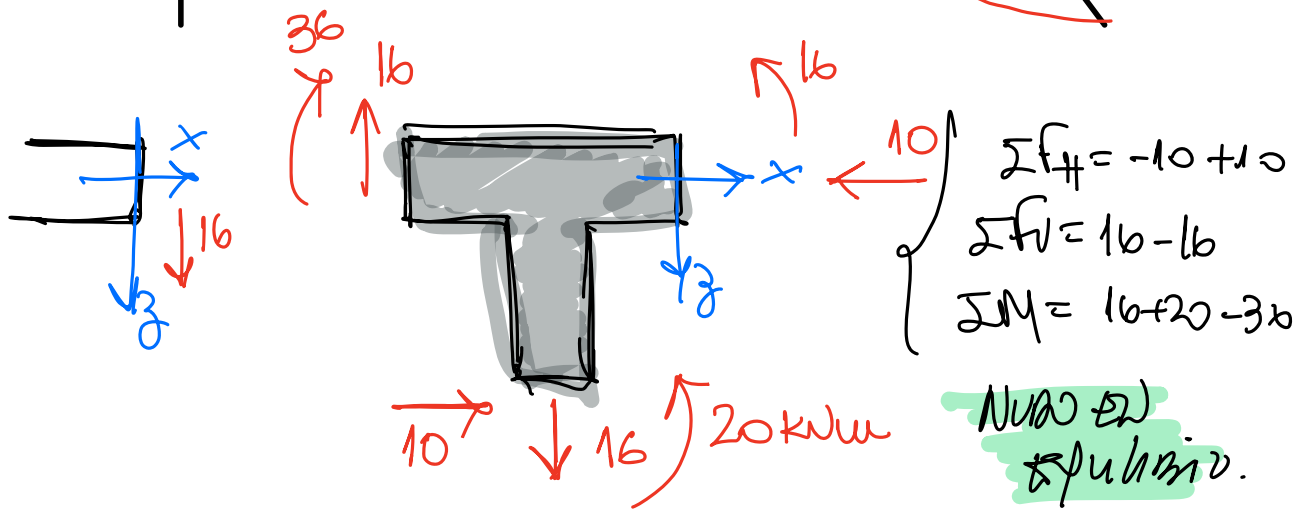
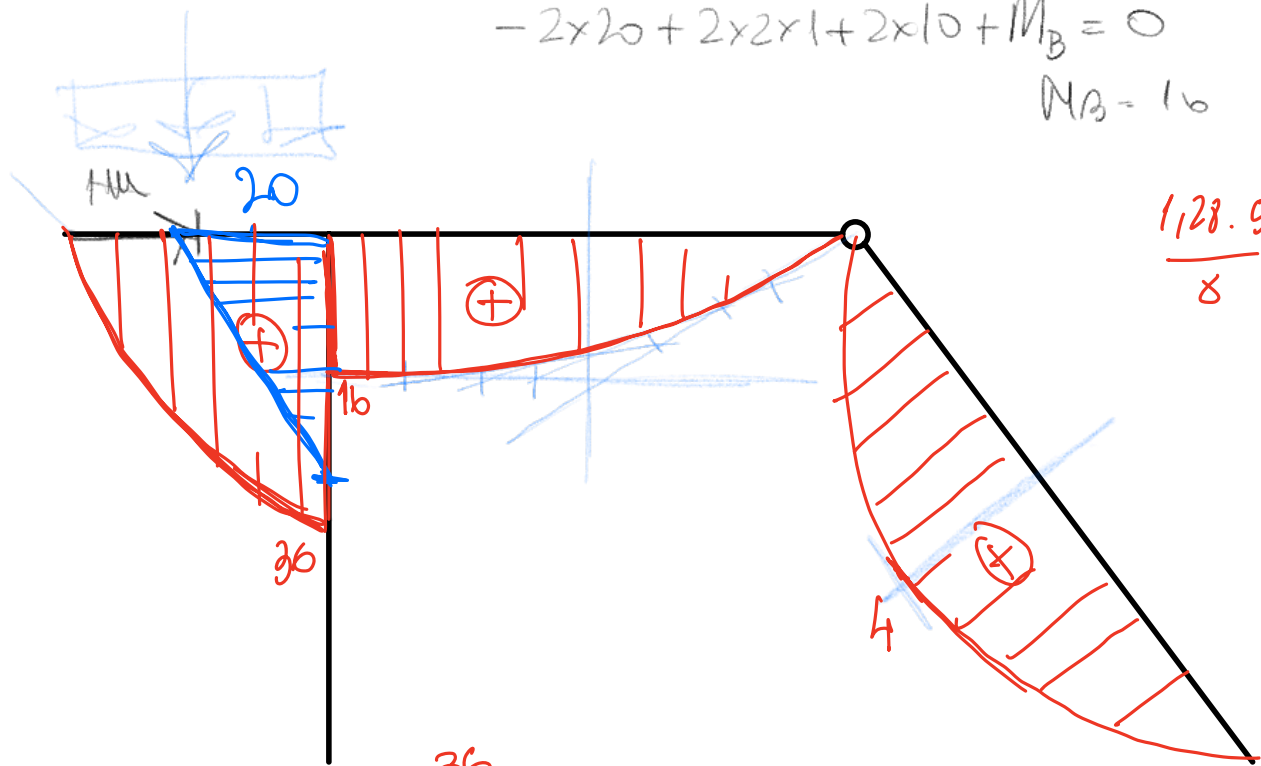
Supongamos que hayo un
BMA en Articulacion
El Q y M \equiv al de
un simplemente
apoyado



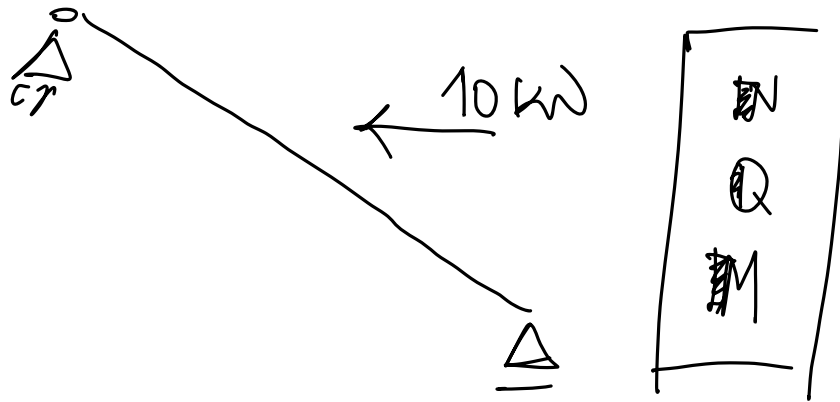
$$-2 \times 20 + 2 \times 2 \times 1 + 2 \times 10 + M_B = 0$$

$$M_B = 16$$

$$\frac{1128.5^2}{8}$$



10) REACCIONES DE VIGAS \Rightarrow ABUR \Rightarrow CADENA
 ASERNA



[1) Ej: RV. + Análisis Cinético

GGDL
 GCV

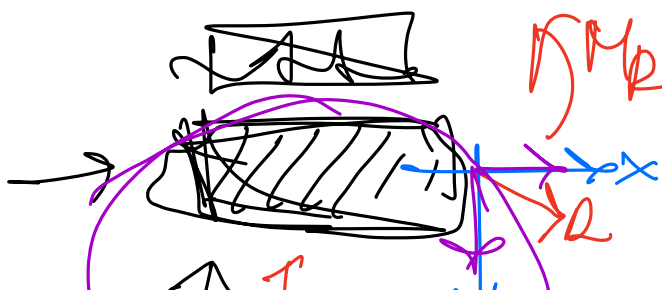
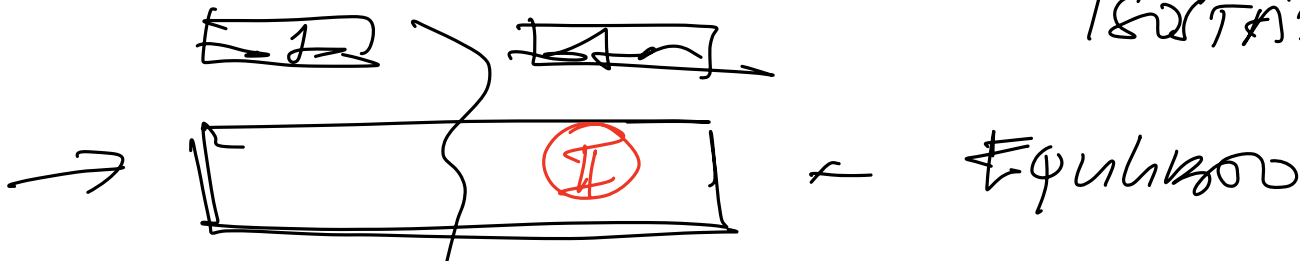
[2) Ej: DC

viga
 pórtico.

Describir en palabras
 que el cuerpo
 NO se mueve

Vin. Apoyate

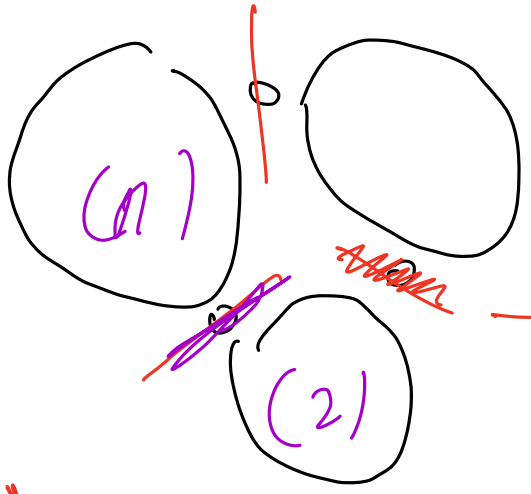
ESTÁTICA.



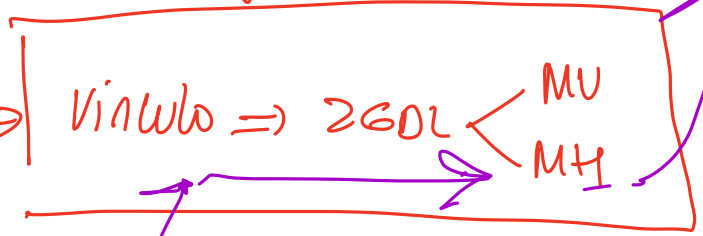
DEFINIMOS

PROYECTAR (R) x
 y

N_{JA}
 $\frac{1}{\text{micras}}$
 $\frac{2}{\text{MACRO}}$
 Constante $\forall x \rightarrow N$
 $\forall z \rightarrow Q$



ESFERAS INTERA



ESTA EN EQUILIB.

ACA ME ESCOGERAN
ADON //

Acá estoy buscando un vinulo entre partículas
 de la UBA

