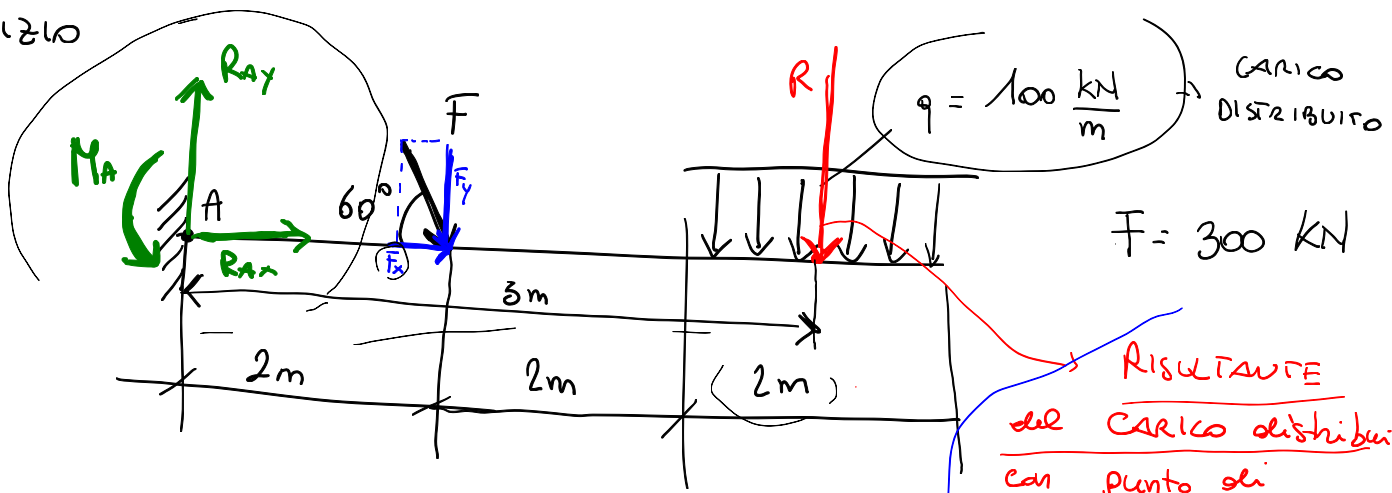


ESERCIZIO



$$\begin{cases} \sum F_x = 0 \\ \sum F_y = 0 \\ \sum M = 0 \end{cases} \quad \begin{array}{l} \text{Eqa. CARDINALI} \\ \text{DELLA STRUTTURA} \end{array}$$

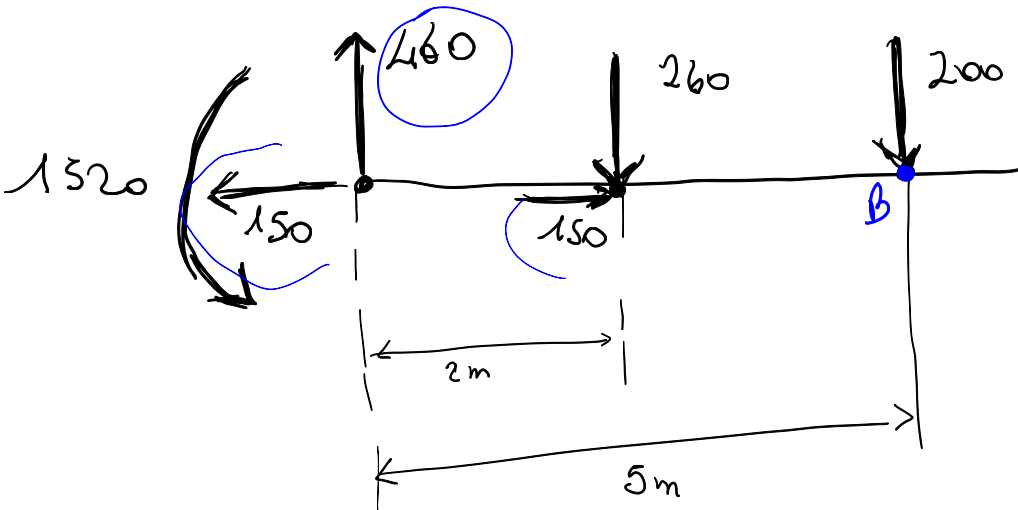
RISULTANTE
del CARICO distribuito
con punto di
applicazione nel
centro della
distribuzione (BARICENTRO)
 $R = 100 \frac{\text{kN}}{\text{m}} \cdot 2 \text{m} = 200 \text{ kN}$

$$F_x = F \cdot \cos 60^\circ = 300 \cdot 0.5 = 150 \text{ kN}$$

$$F_y = F \cdot \sin 60^\circ = 300 \cdot \frac{\sqrt{3}}{2} = 260 \text{ kN}$$

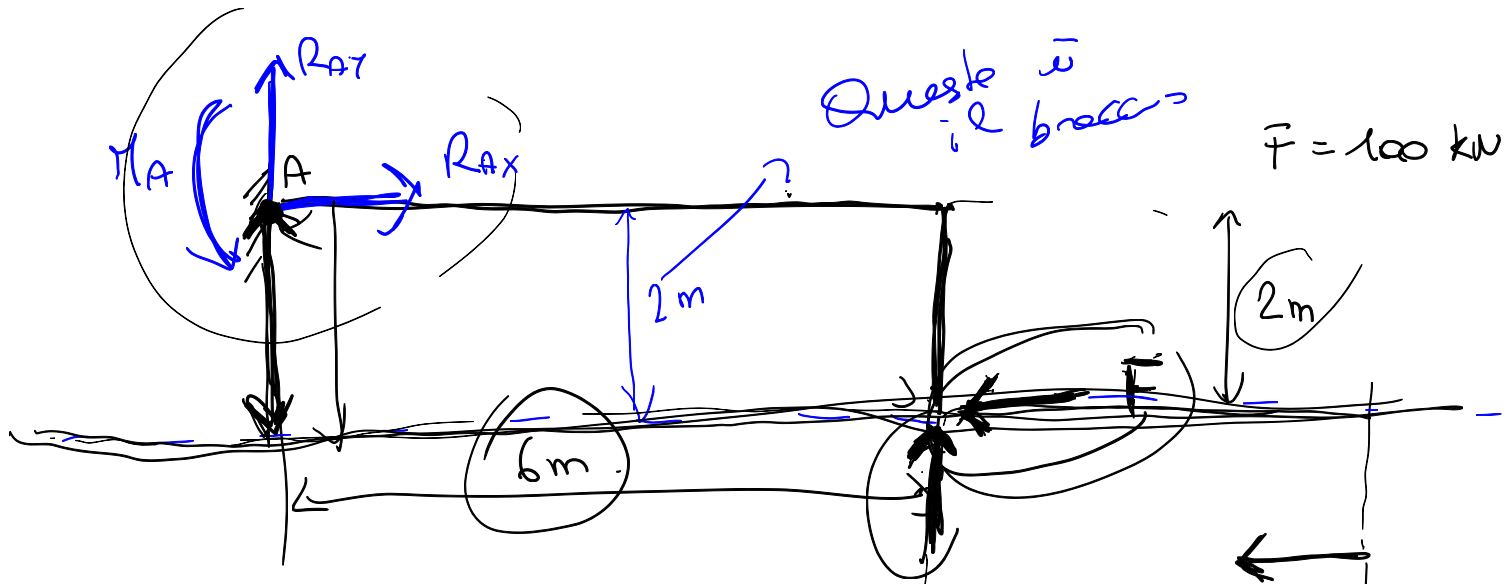
$$\begin{array}{l} \text{+} \\ \rightarrow \\ \text{+} \\ \uparrow \\ \text{A)} \text{+} \end{array} \left\{ \begin{array}{l} F_x + R_{Ax} = 0 \\ R_{Ay} - F_y - R = 0 \\ -F_y \cdot 2\text{m} - R \cdot 3\text{m} + M_A = 0 \end{array} \right. \Rightarrow$$

$$\begin{cases} R_{Ax} = -F_x \\ R_{Ay} = F_y + R \\ M_A = F_y \cdot 2\text{m} + R \cdot 3\text{m} \end{cases} \Rightarrow \begin{cases} R_{Ax} = -150 \text{ kN} \\ R_{Ay} = 260 \text{ kN} + 200 \text{ kN} = 460 \text{ kN} \\ M_A = 260 \text{ kN} \cdot 2\text{m} + 200 \text{ kN} \cdot 3\text{m} = 1520 \text{ kN} \cdot \text{m} \end{cases}$$



VERIFICO I CALCOLI

$$\begin{array}{l} \rightarrow -150 + 150 = 0 \\ \uparrow 460 - 260 - 200 = 0 \\ \text{(B)} 1520 - 460 \cdot 5 + 260 \cdot 3 = 0 \end{array}$$



$$\begin{array}{l} + \\ \rightarrow \end{array} \quad R_{Ax} - F = 0 \quad \Rightarrow \quad R_{Ax} = F$$

$$\begin{array}{l} + \\ \uparrow \end{array} \quad R_{Ay} = 0 \quad \Rightarrow \quad R_{Ay} = 0$$

$$\begin{array}{l} \curvearrow + \end{array} \quad M_A - F \cdot 2m = 0 \quad \Rightarrow \quad M_A = F \cdot 2m$$

