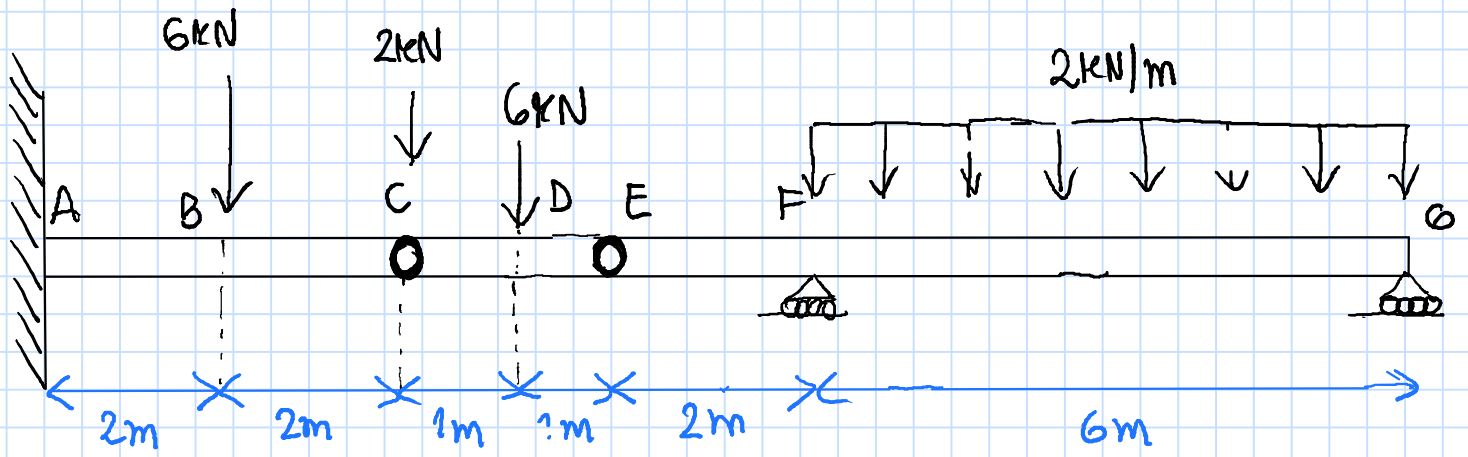


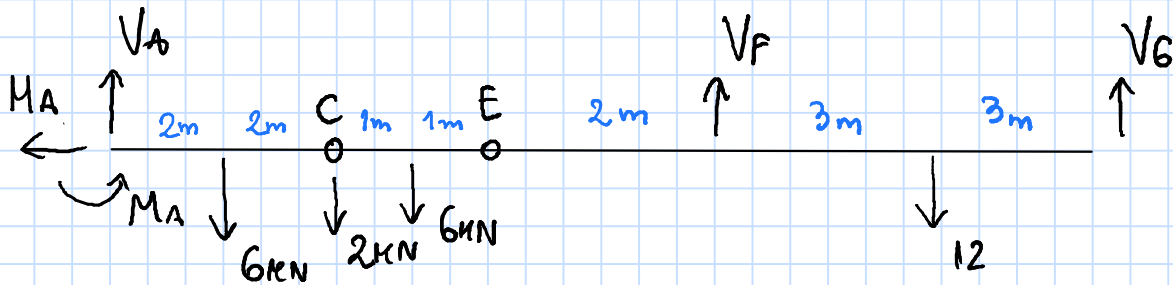
PAUTA P2 EJERCICIO 1



INCOGNITAS : A_x, A_y, M_A, F_y, G_y

ECUACIONES : $\sum F_x, \sum F_y, \sum M_A, \sum M_C, \sum M_E$ } $GIC = 0$
ISOSTÁTICA ✓

DCL



$$\sum F_y = V_A - 6 - 2 - 6 + V_F + V_G - 12 = 0$$

(0,4 pTs)

$$\sum F_x = H_A = 0$$

(0,4 pTs)

(0,4 pTs)

$$\sum M_A = M_A - 2 \cdot 6 - 4 \cdot 2 - 5 \cdot 6 + 8 \cdot V_F + 14 \cdot V_G - 12 \cdot 11 = 0$$

$$\sum M_C = -6 \cdot 1 + 4 \cdot V_F + 10 \cdot V_G - 7 \cdot 12 = 0$$

(0,4 pTs)

$$\sum M_E = 2 \cdot V_F + 8 \cdot V_G - 5 \cdot 12 = 0$$

(0,4 pTs)

$$\Rightarrow M_A = 32 \text{ kN} \cdot \text{m} \quad V_F = 10 \text{ kN}$$

$$H_A = 0$$

$$V_G = 5 \text{ kN}$$

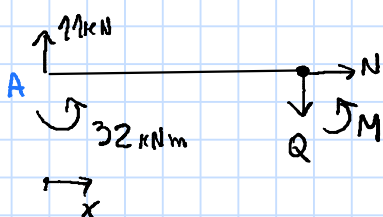
$$V_A = 11 \text{ kN}$$

(1,0 pTs)

ESFUERZOS :

TRAMO AB : ($x \in [0, 2]$)

TRAMO BC : ($x \in [0, 2]$)

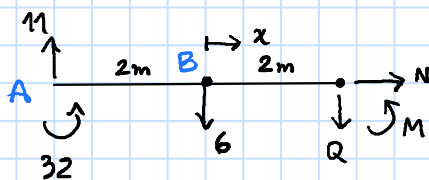


$$N = 0$$

$$\Rightarrow Q = 11$$

$$M = 11x - 32$$

(0,4)



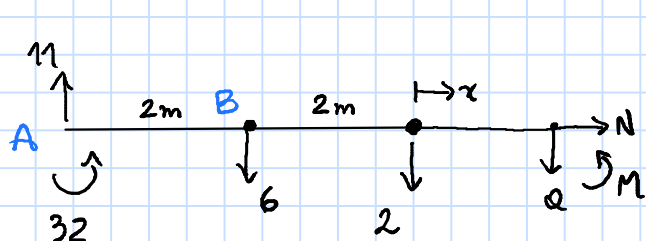
$$\Rightarrow N = 0$$

$$Q = 5$$

$$M = 11(2+x) - 6x = 5x + 22 - 32 = 5x - 10$$

(0,4)

TRAMO CD ($x \in [0,1]$)

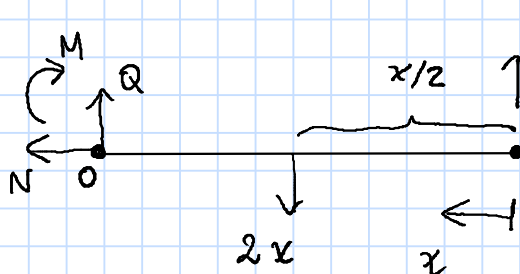


$$N = 0 \Rightarrow Q = 3$$

(0,4)

$$M = -32 - 2x - 12 - 6x + 44 + 11x = 3x$$

TRAMO GF ($x \in [0,6]$)



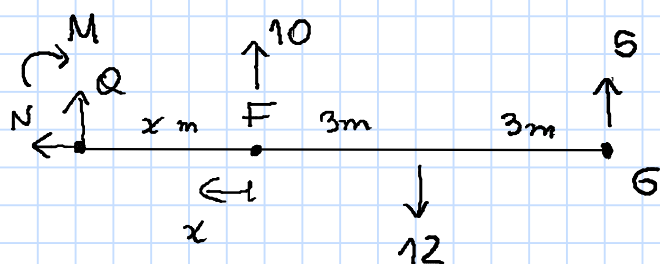
$$N = 0$$

$$Q = 2x - 5$$

$$M = 5x - x^2 \quad (x^2 - 5x) \text{ DEL OTRO LADO}$$

(0,4)

TRAMO FD ($x \in [0,3]$)



$$N = 0$$

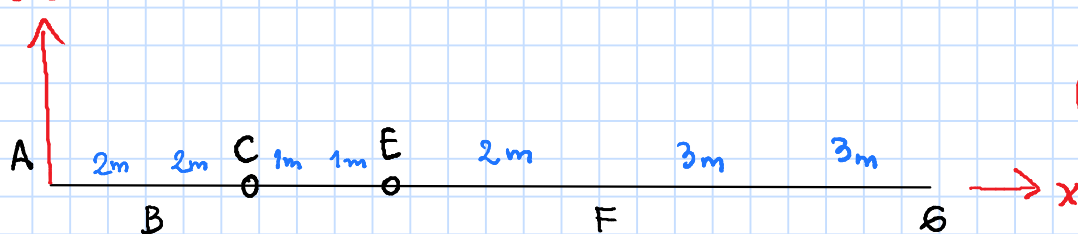
$$\Rightarrow Q = -3$$

(0,4)

$$M = (x+6) \cdot 5 - (x+3)12 + 10x$$

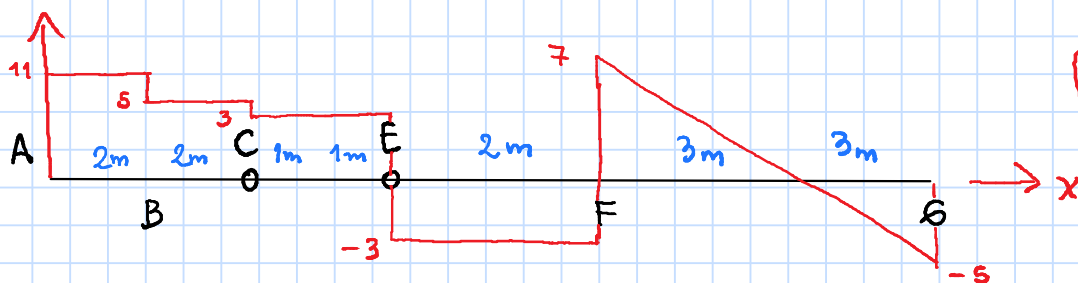
$$= 3x - 6 \quad (3 - 3x) \text{ DEL OTRO LADO}$$

N [kN]



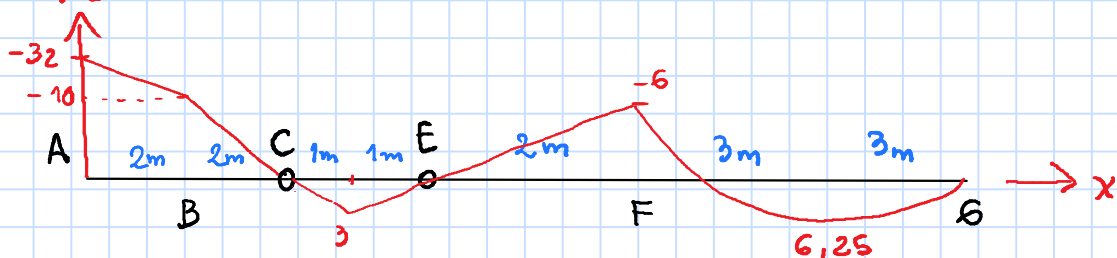
(0,2)

Q [kN]



(0,4)

M [kN-m]



(0,4)