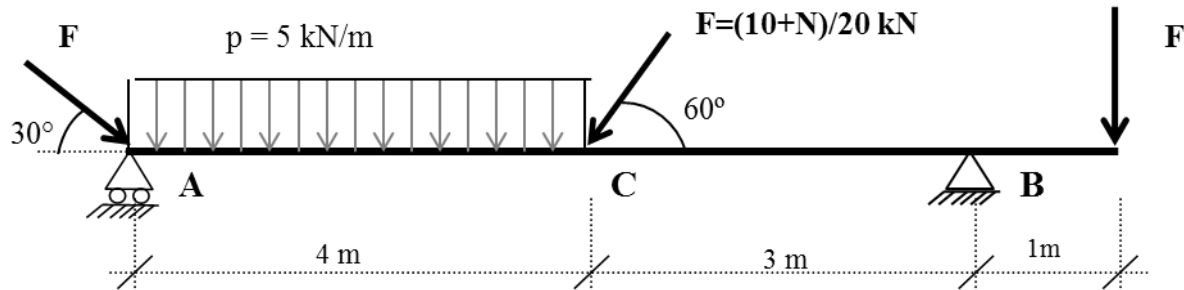




Nome: _____ Nº USP: _____

Determine os diagramas de esforços solicitantes.
Sendo N= 2 últimos algarismos do seu NºUSP.



Reações de apoio

$$\sum F_x = 0 \quad F \cos 30^\circ - F \cos 60^\circ - H_B = 0$$
$$H_B = 0,366F \text{ (kN)} \leftarrow$$

$$\sum F_y = 0 \quad F \sin 30^\circ + 5 \times 4 + F \sin 60^\circ + F = V_A + V_B$$
$$V_A + V_B = 2,366F + 20 \text{ (kN)}$$

$$5 \times 4 \times 2 + F \sin 60^\circ \times 4 + F \times 8 = V_B \times 7$$
$$\sum M_A = 0 \quad V_B = 1,64F + 5,71 \text{ (kN)} \uparrow$$
$$V_A = 0,726F + 14,29 \text{ (kN)} \uparrow$$

Exemplo de traçado de Diagramas para F=10 kN:

Diagrama de esforço normal

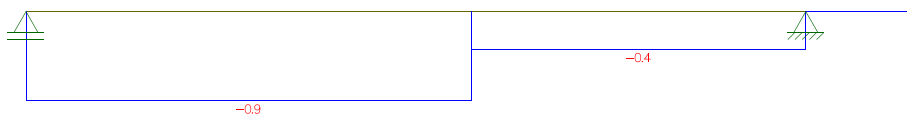


Diagrama de força cortante

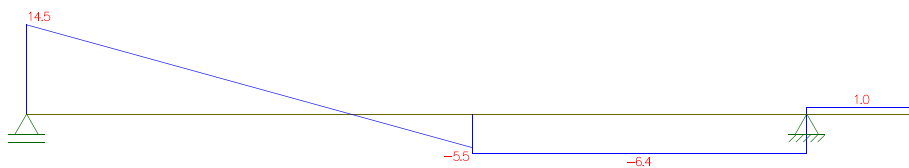


Diagrama de momento fletor

