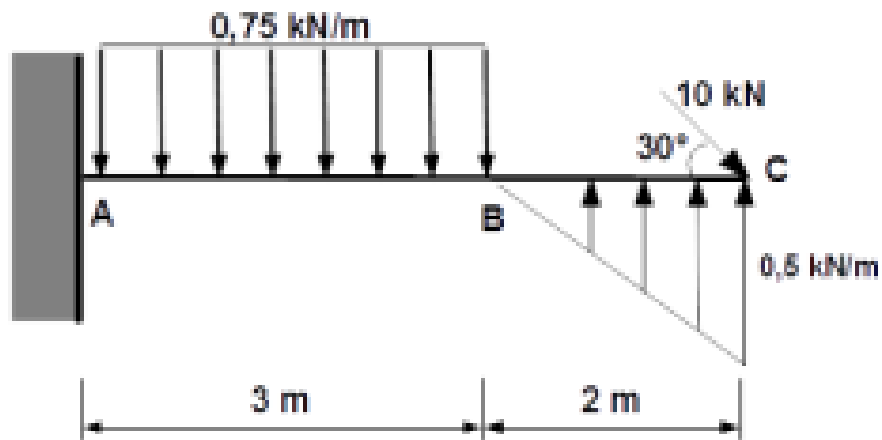


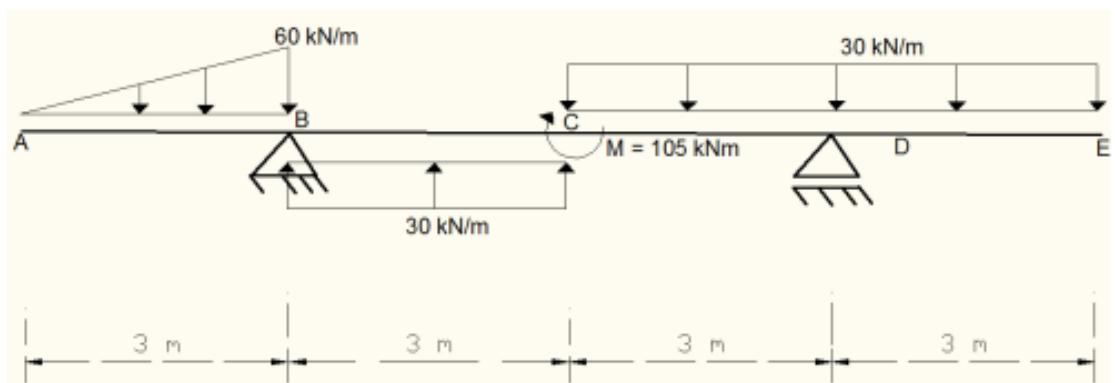
11/04/2023

- 1) Calcular as reações a seguir.



Resposta:  $R_x = -8,67$  kN  
 $R_y = 6,75$  kN  
 $RM = 26,21$  kN.m

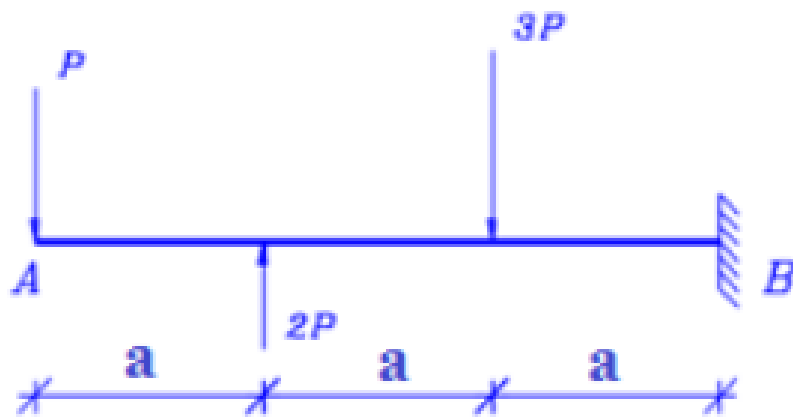
- 2) Calcular as reações a seguir.



Resposta:

$B_x = 0$ ;  $B_y = 20$  kN ( $\uparrow$ );  $D_y = 160$  kN ( $\uparrow$ )

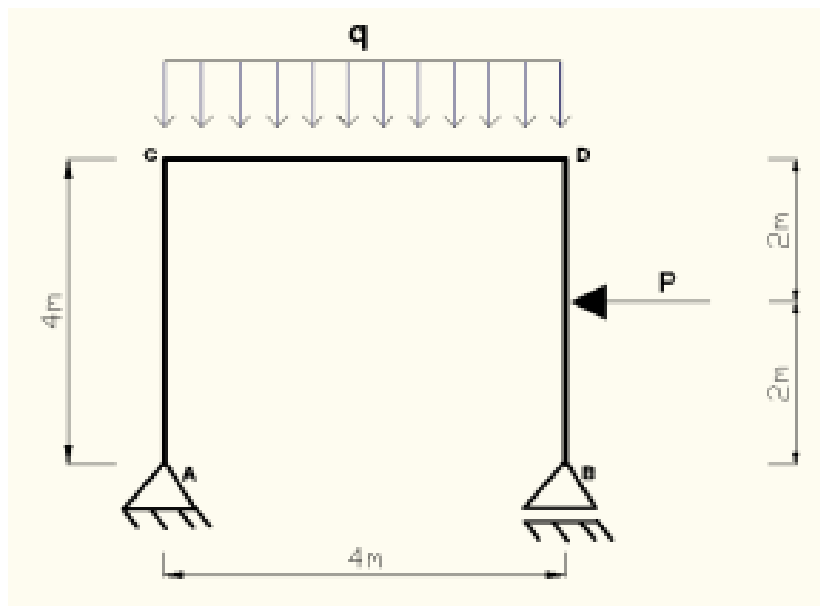
3) Determinar as reações em B, em função de P.



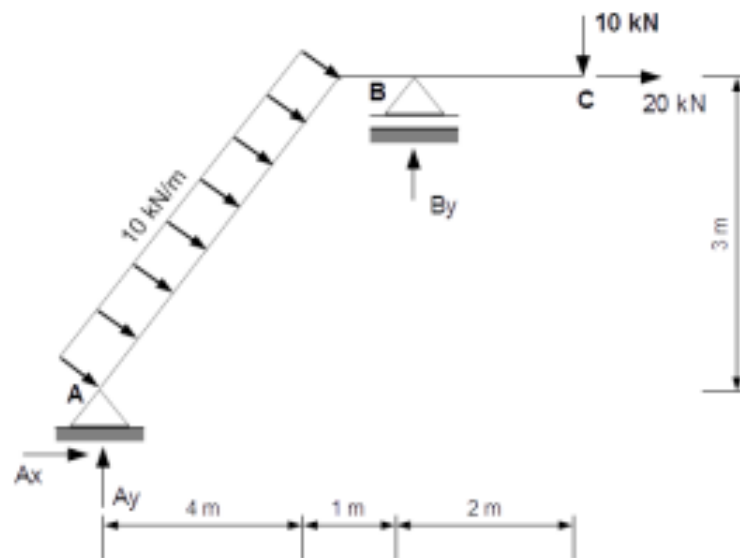
Resposta:

$$F_{xB} = 0; F_{yB} = 2P; R_{MB} = 2Pa$$

4) Determinar as reações do pórtico.

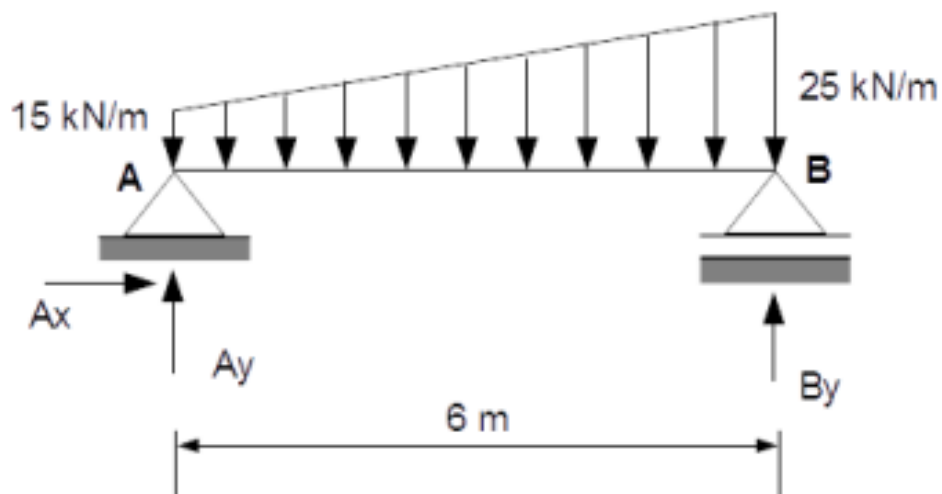


5) Determinar as reações a seguir.



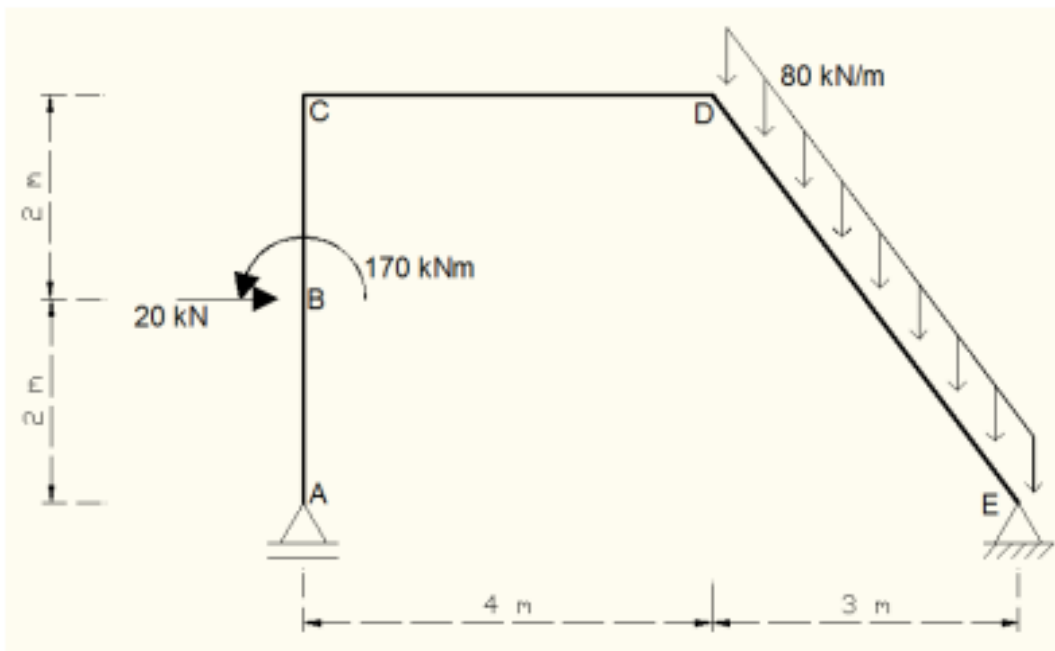
Resposta:  $A_x = -50 \text{ kN}$   
 $A_y = -1 \text{ kN}$   
 $B_y = 51 \text{ kN}$

6) Calcular as reações a seguir.

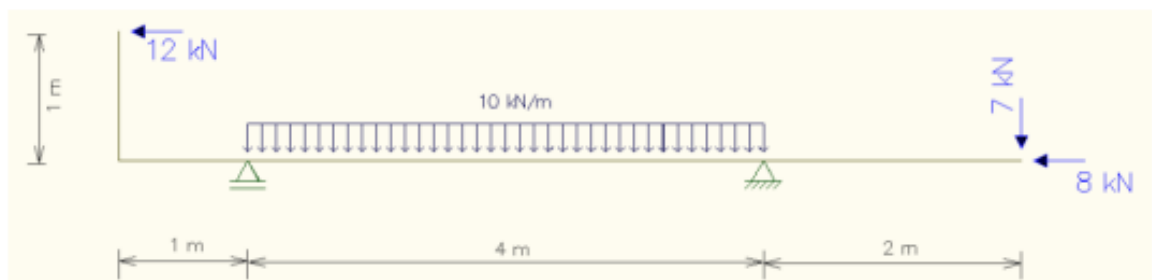


Resposta:  $A_x = 0 \text{ kN}$   
 $A_y = 55 \text{ kN}$   
 $B_y = 65 \text{ kN}$

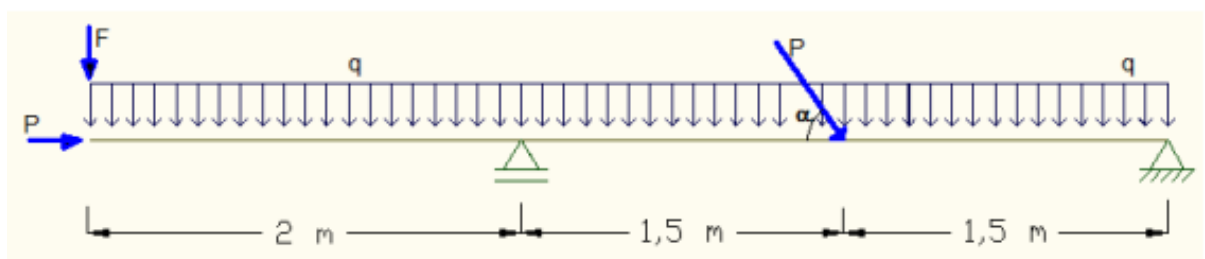
7) Calcular as reações a seguir.



8) Calcular as reações a seguir.



9) Calcular as reações dados  $P = 10\text{kN}$ ,  $F = P/10$ ,  $q = 8\text{kN/m}$  e  $\alpha = 30^\circ$ .



10) Calcular as reações.

