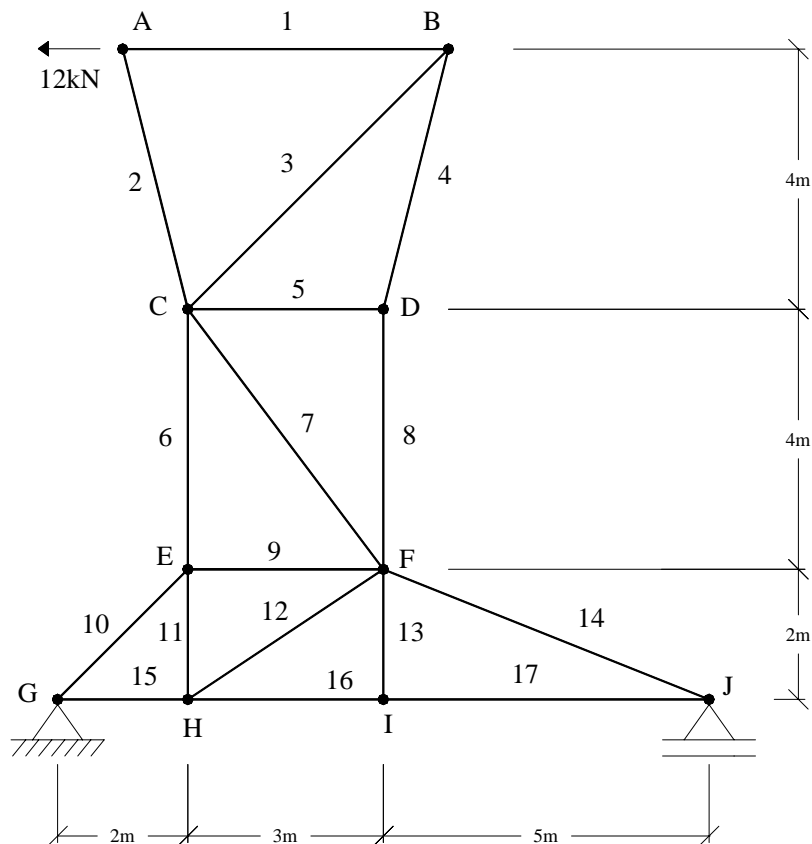


NºUSP: _____ Nome: _____

Questão 2 (3,0)

Para a treliça ilustrada, pedem-se:

- As reações de apoio;
- As forças normais nas barras 6, 7 e 8;
- As forças normais nas barras 9, 10 e 11.



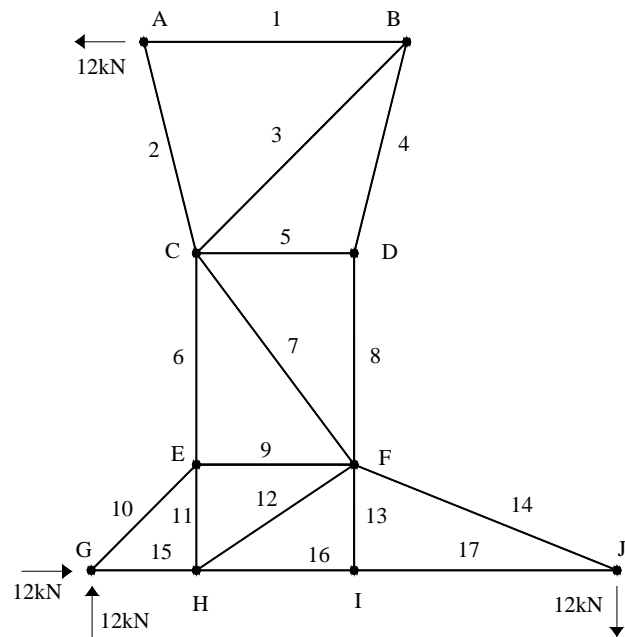
Resposta

a)(1,0)

$$X_G = 12kN$$

$$Y_G = 12kN$$

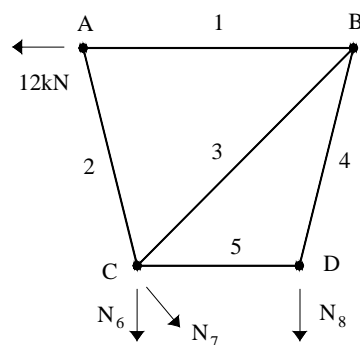
$$Y_J = -12kN$$



b)(1,0)

$$\sum H = 0 \Rightarrow N_7 = 20kN$$

$$\sum M_C = 0 \Rightarrow N_8 = 16kN$$



$$\sum M_F = 0 \Rightarrow N_6 = -32kN$$

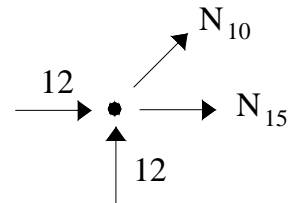
Verificação:

$$\sum V = 0 \Rightarrow ok$$

c)(1,0)

Nó G:

$$\sum V = 0 \Rightarrow N_{10} = -12\sqrt{2}kN$$



Nó E:

$$\sum V = 0 \Rightarrow N_{11} = -20kN$$

$$\sum H = 0 \Rightarrow N_9 = -12kN$$

