

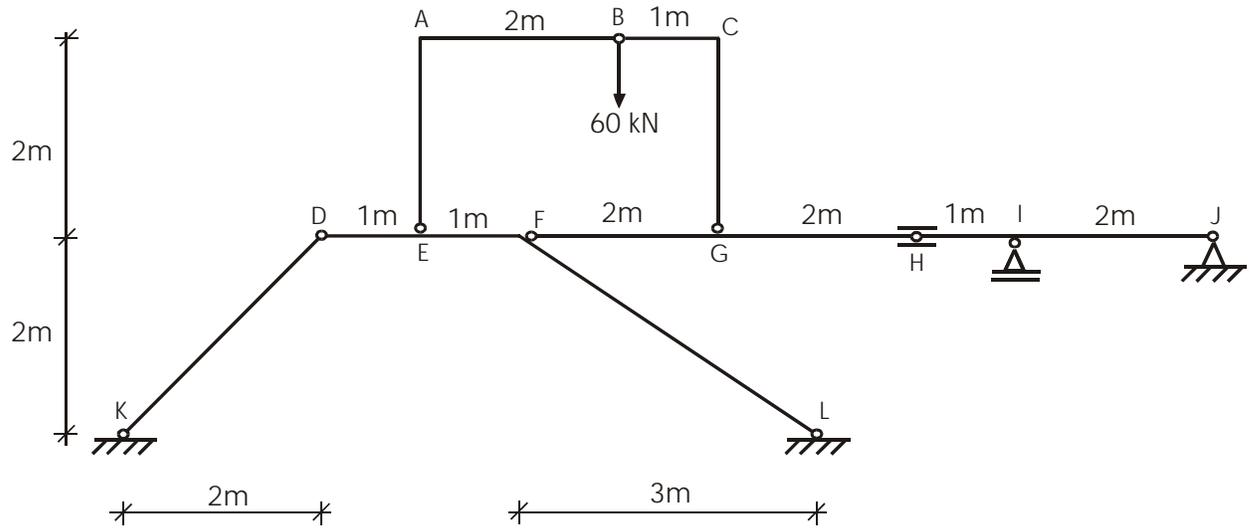
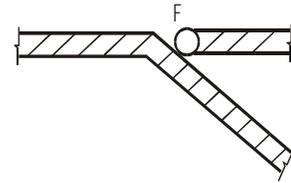
NºUSP: _____ Nome: _____

Questão 3 (4,0)

Para a estrutura da figura, solicitada por uma carga vertical de 60 kN em B, obter:

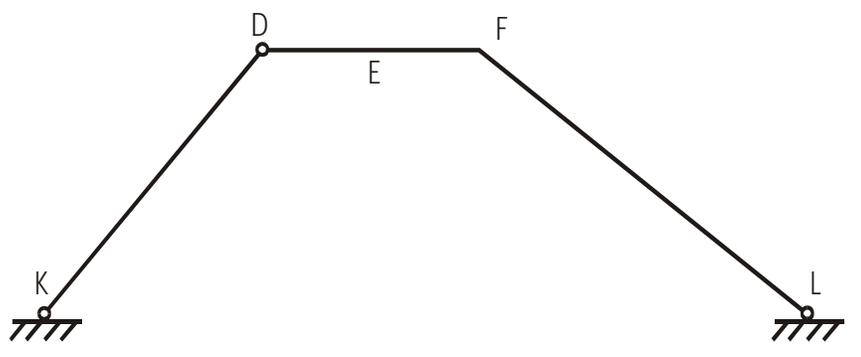
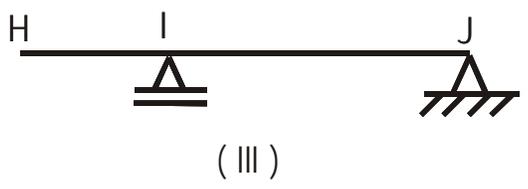
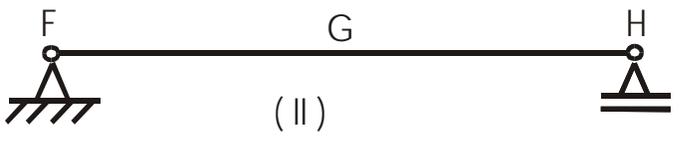
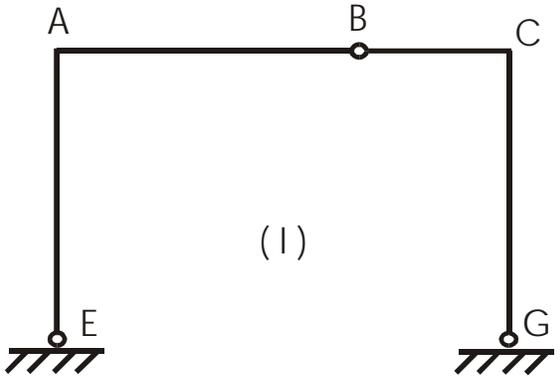
- a) as subestruturas das quais ela se compõe;
- b) as reações de apoio das subestruturas e da estrutura como um todo;
- c) os diagramas de esforços solicitantes do trecho DEF.

Obs: a articulação em F é externa ao trecho DEF, conforme o detalhe.



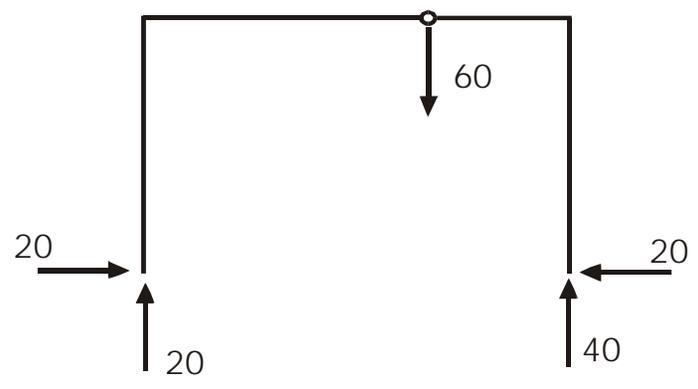
Solução:

a)

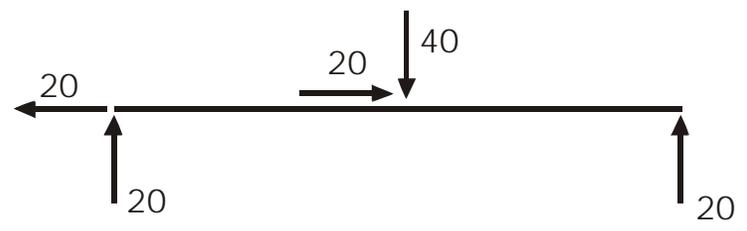


b)

(I) $\sum M_E = 0$
 $\sum V = 0$
 $M_{Ee} = 0$
 $\sum H = 0$



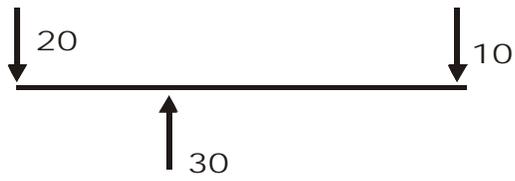
(II) $\sum H = 0$
 $\sum M_F = 0$
 $\sum V = 0$



$$(III) \quad \sum H = 0$$

$$\sum M_I = 0$$

$$\sum V = 0$$

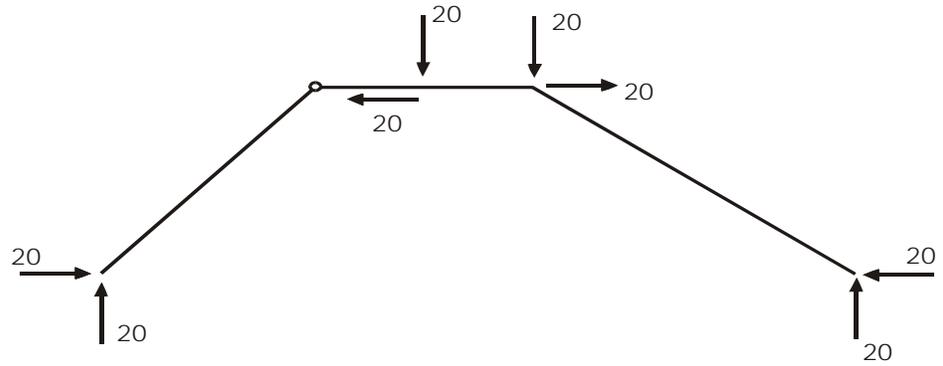


$$(IV) \quad \sum M_K = 0$$

$$\sum V = 0$$

$$M_{De} = 0$$

$$\sum H = 0$$



c)

