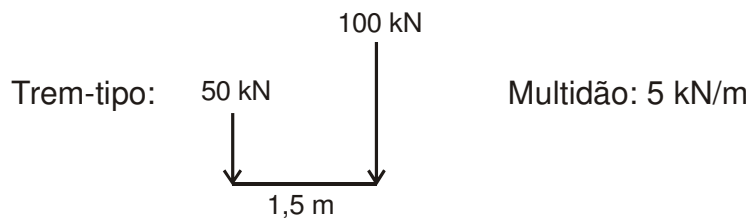
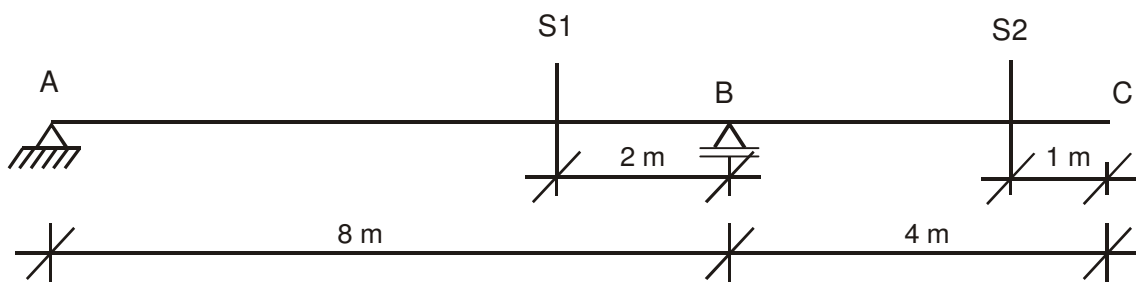


Nº USP: \_\_\_\_\_ Nome: \_\_\_\_\_

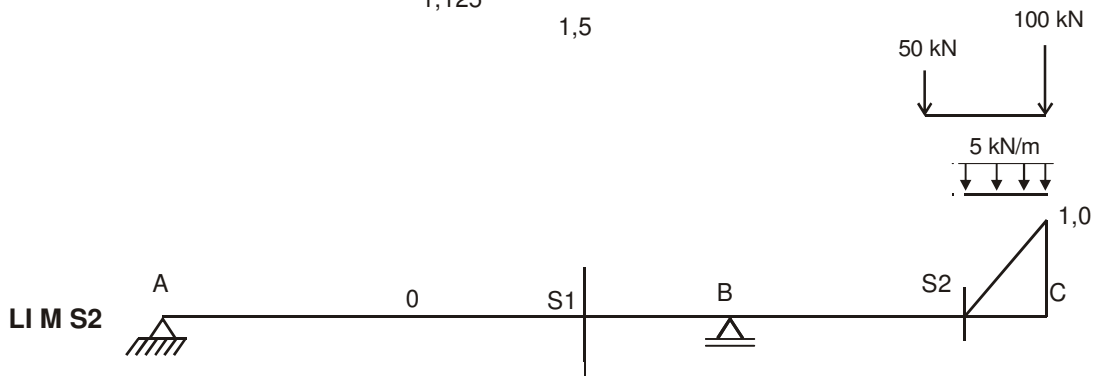
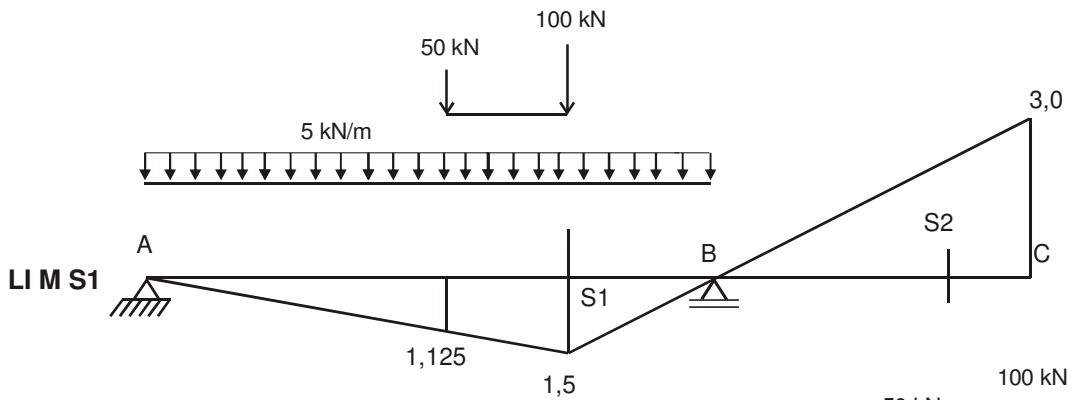
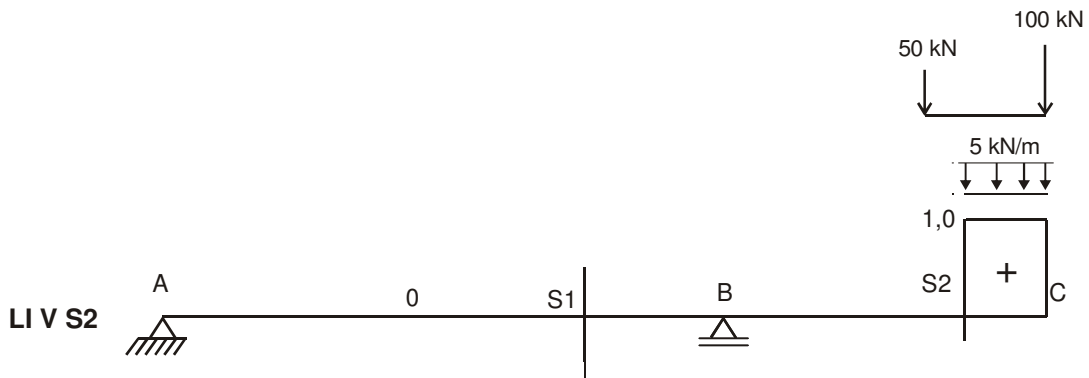
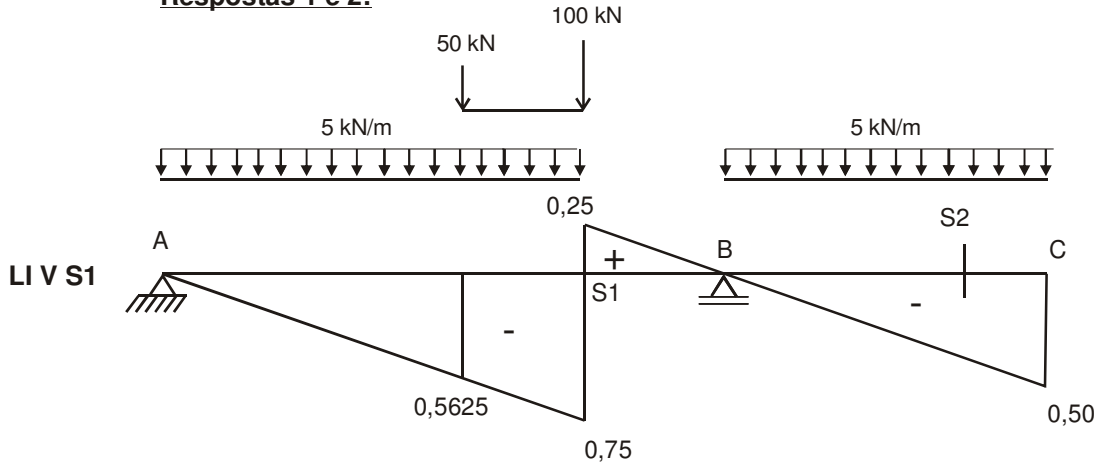
**2ª Questão (3,0 pontos)**

Para a estrutura e as cargas da figura, pede-se:

1. As linhas de influência LI V S1, LI M S1, LI V S2, LI M S2.
2. As posições do trem-tipo e da multidão para  $V_{min}$  S1,  $V_{max}$  S2,  $M_{max}$  S1 e  $M_{min}$  S2.
3. Os valores de  $M_{max}$  S1 e  $V_{max}$  S2.



**Respostas 1 e 2:**



**Resposta 3:**  $M_{\max} S1 = 236,25 \text{ kN.m}$   
 $V_{\max} S2 = 105 \text{ kN}$