

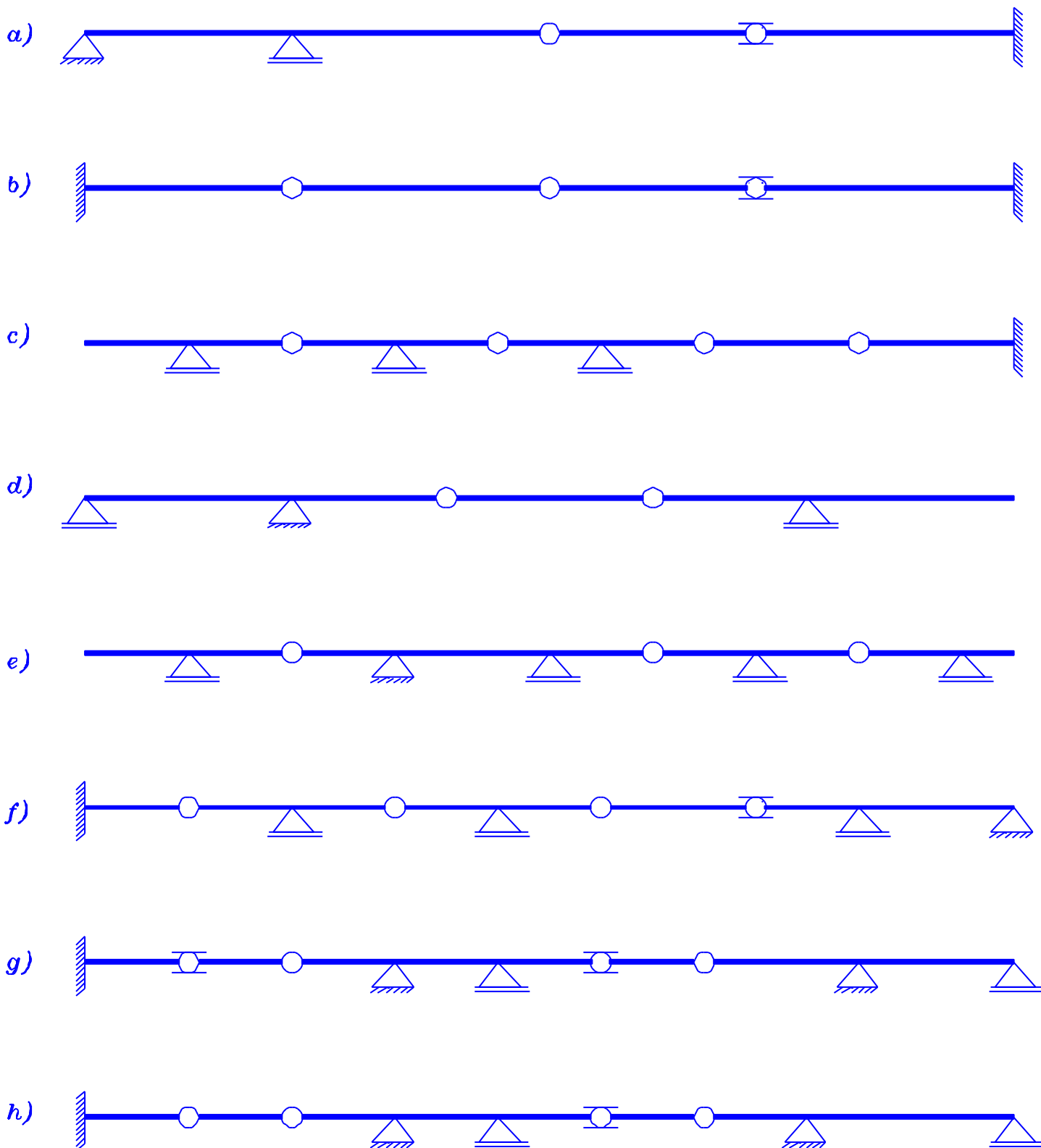


Lista de exercícios nº 7

Vigas Gerber

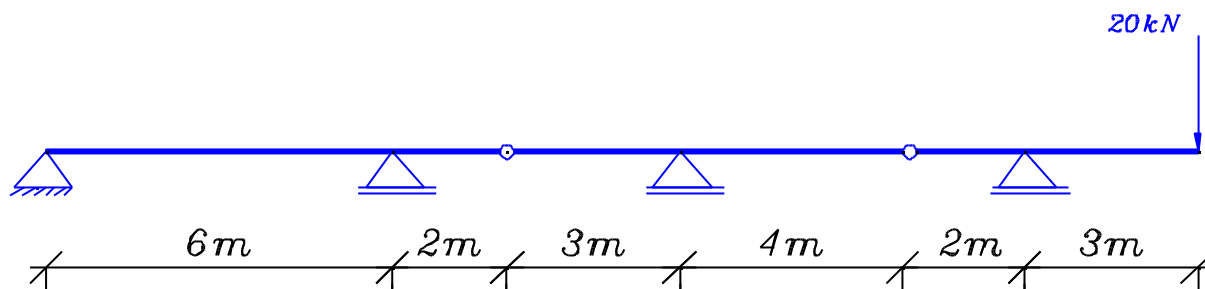
1 - Determine quais destas vigas são isostáticas; as articulações  são móveis e as articulações:  são fixas:



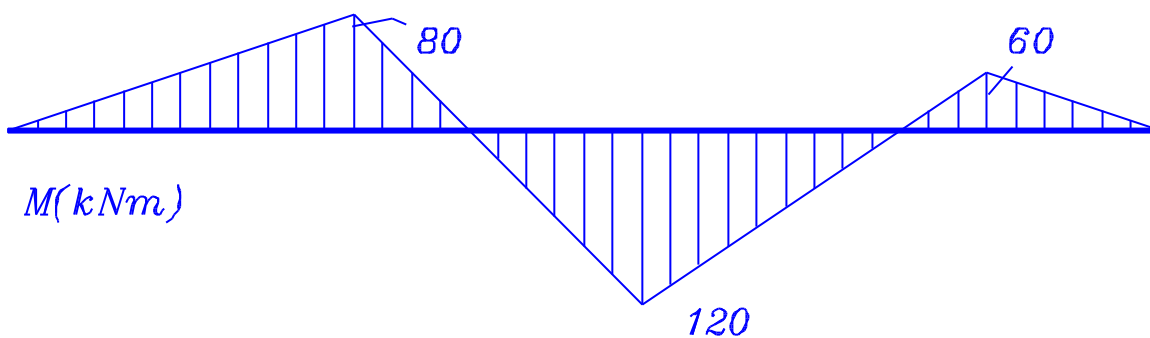
R: a, e, f, g.

2 - Traçar o diagrama de momentos fletores sem determinar as reações de apoio:

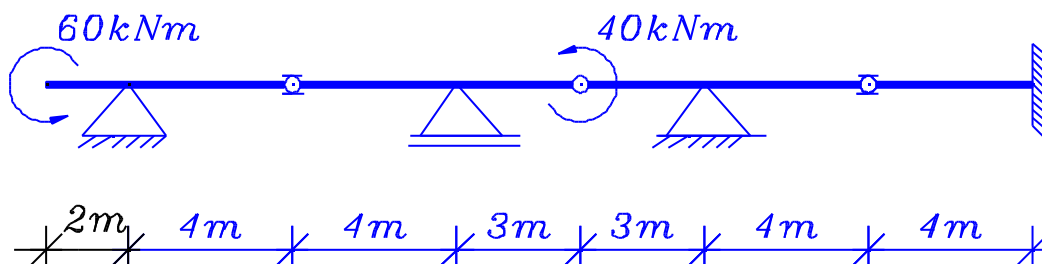
2.1



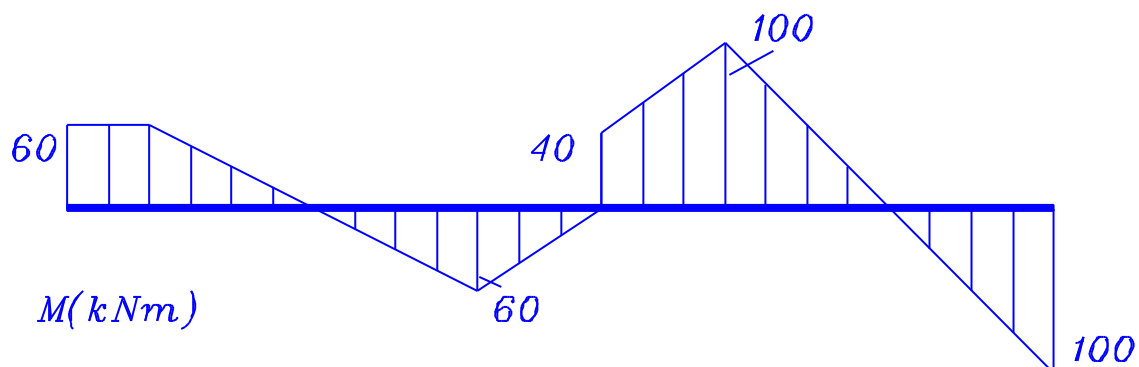
R:



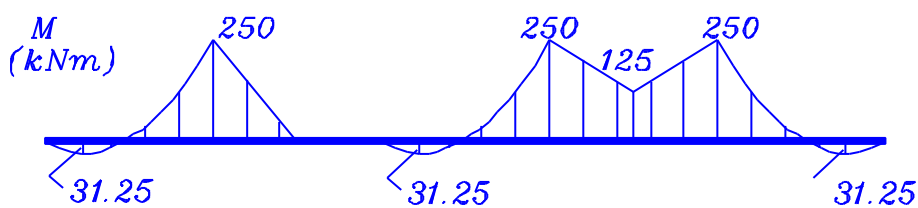
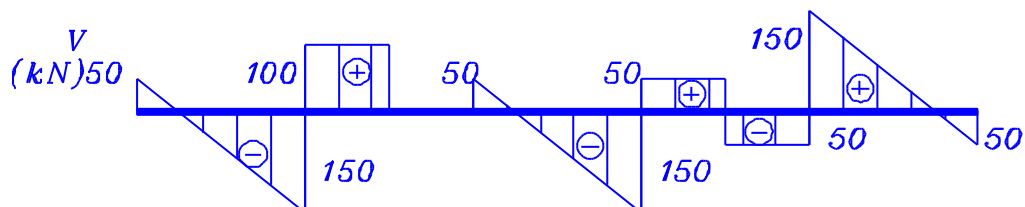
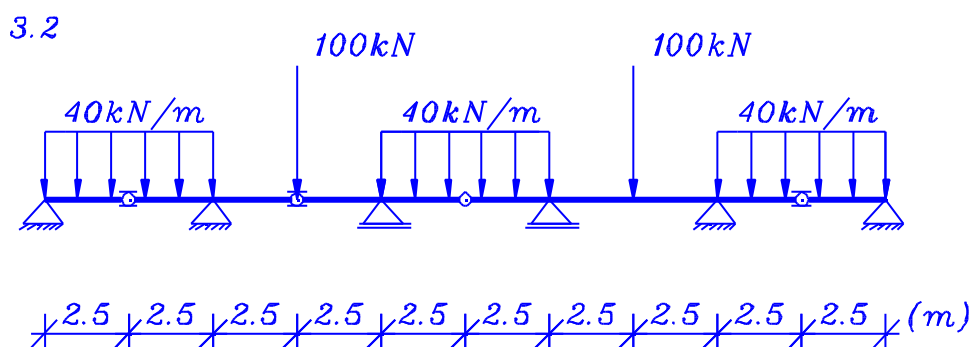
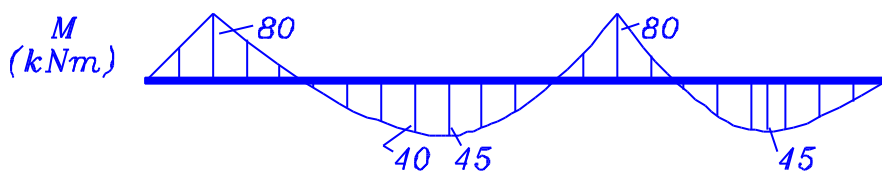
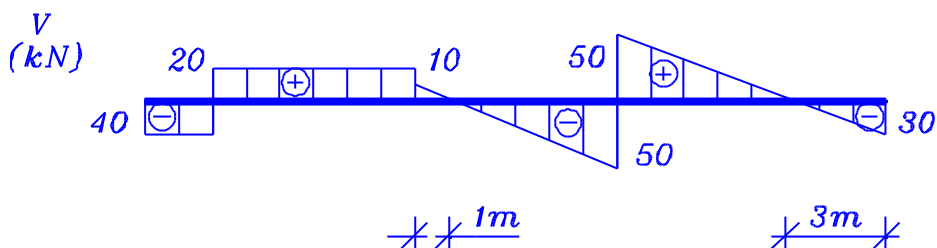
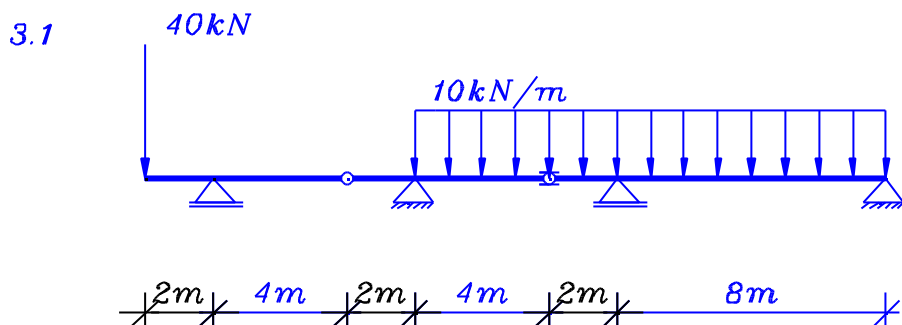
2.2



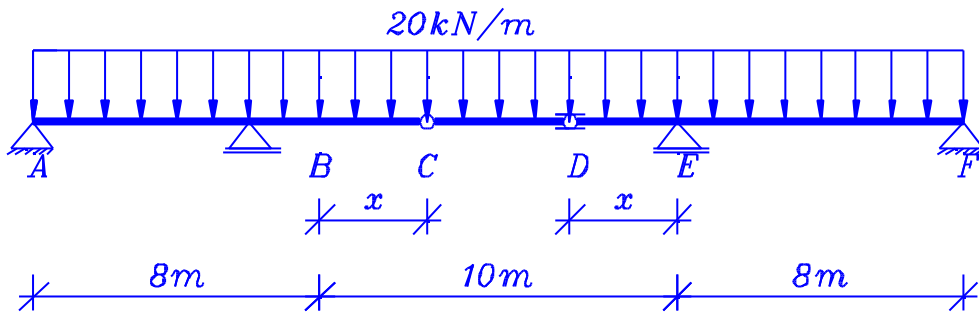
R:



3 - Traçar os diagramas de esforços solicitantes:

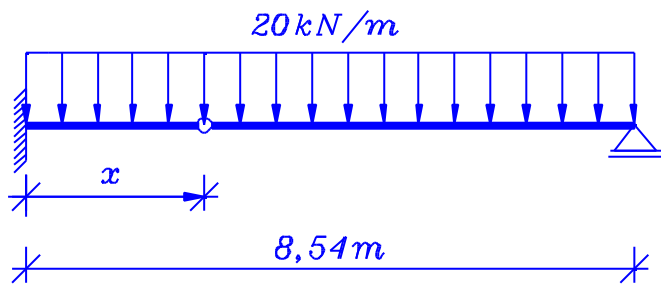


4 - Determinar o valor de x para o qual, no trecho **BE** da viga abaixo, o máximo momento fletor negativo e o máximo momento fletor positivo tornam-se iguais em módulo:



R: $x = 1,46 \text{ m}$

5 - Determinar x de modo que a viga da figura fique sujeita aos menores momentos fletores possíveis:



R: $x = 1,46 \text{ m}$