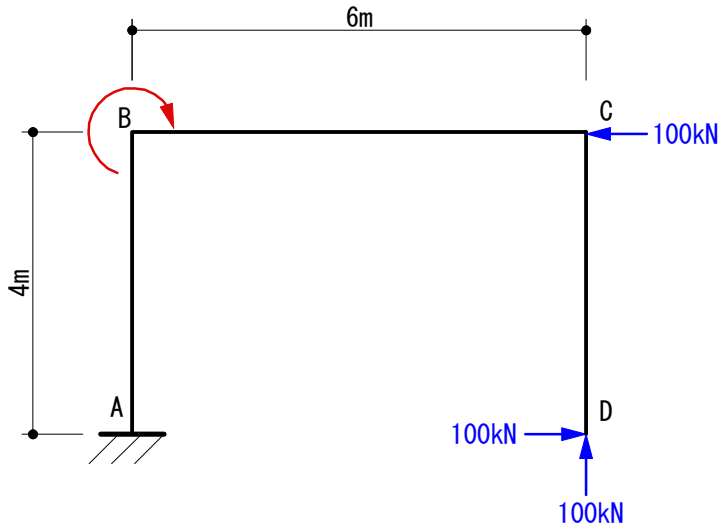
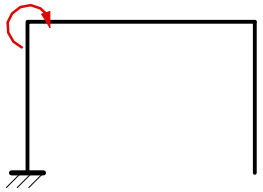
■問題　図のように荷重を受けるラーメンにおいて、A点の曲げモーメントが0のときの、B点の曲げモーメントの値を求めよ。



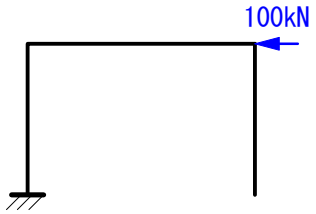
・片持ち梁のラーメン
・複数の荷重が作用していますが、解き易い問題です。

■解答
それぞれ荷重をばらして考えます。

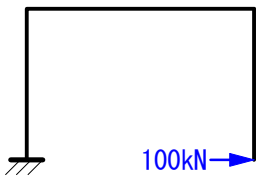
▼応力図1



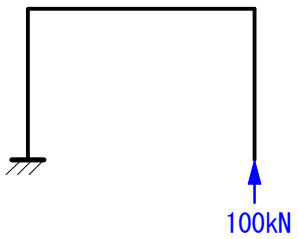
▼応力図2



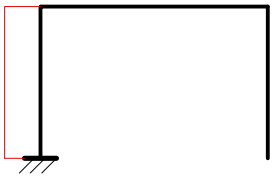
▼応力図3



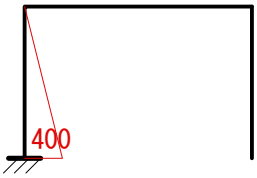
▼応力図4



▼M図1

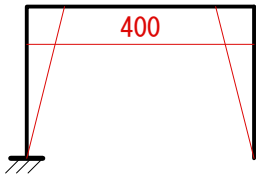


▼M図2



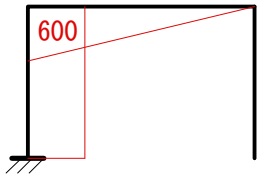
100*4 = 400

▼M図3



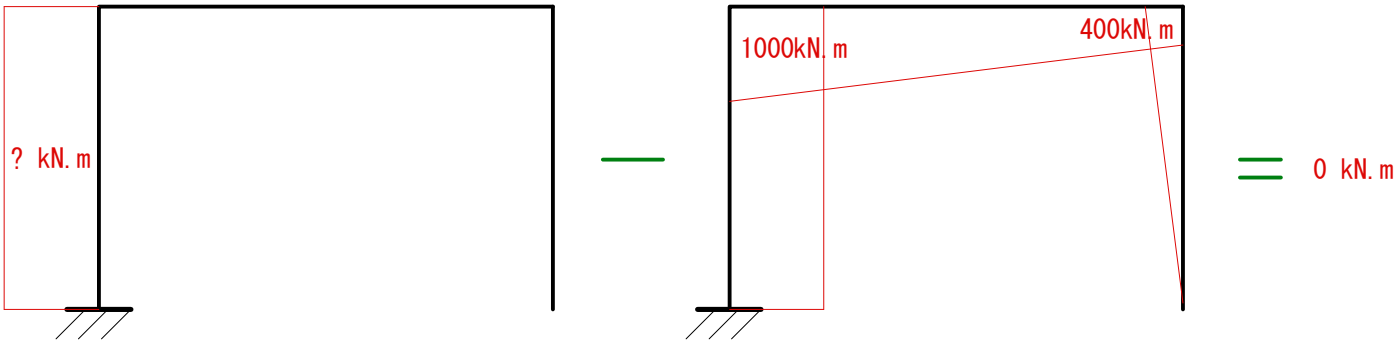
100*4 = 400

▼M図4



100*6 = 600

▼A点の曲げモーメント = M図1 − (M図2 + M図3 + M図4)



M図1　　(M図2 + M図3 + M図4)

従って、? kN.m = 1000 kN.m

答え　1000 kN.m

ARKHITEK