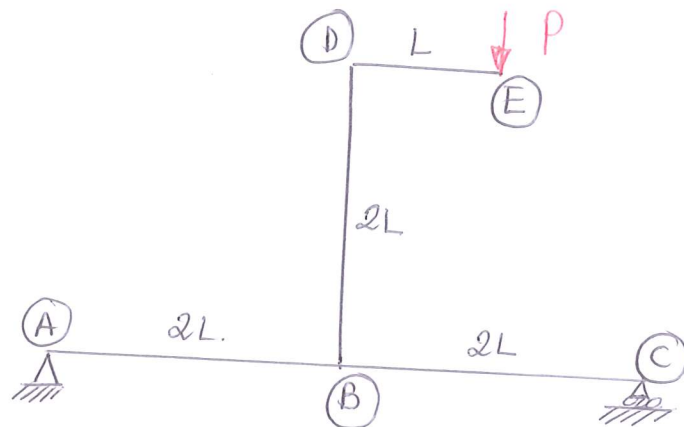


2.4.22

GIVET:

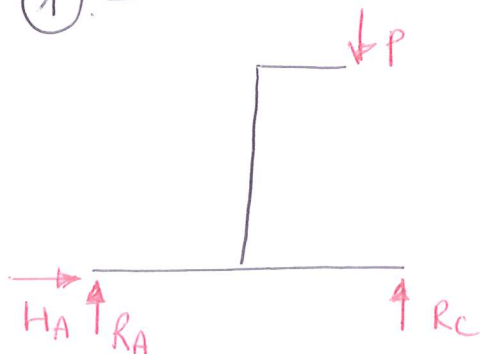


SÖKT: Rita T och M diagram för delen ABC.

LÖSNING:

1. Global jmv  $\Rightarrow$  Reaktionskrafter
2. Snitta och jmv  $\Rightarrow$  Inre krafter och moment.

①.-



$$\rightarrow : H_A = 0 \quad (1)$$

$$\Sigma A : 3LP - 4LR_C = 0$$

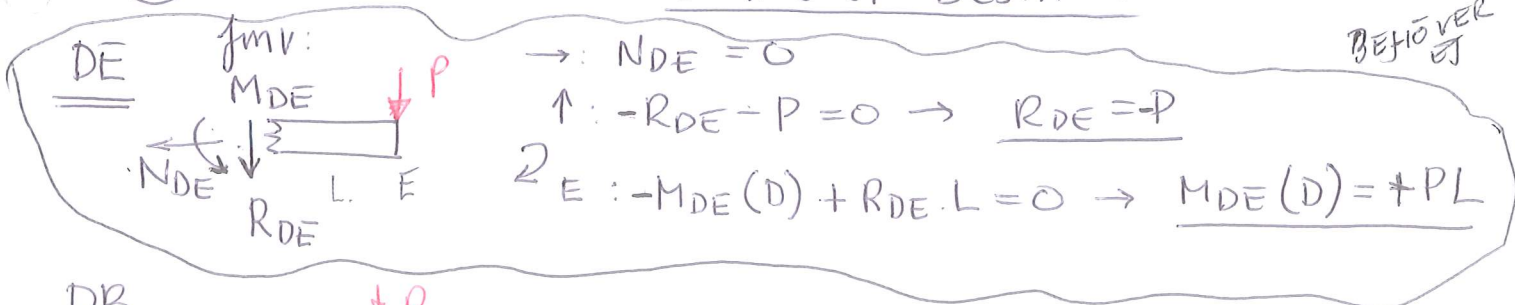
$$R_C = \frac{3}{4}P \quad (2)$$

$$\uparrow : R_A + R_C - P = 0$$

$$R_A = P/4 \quad (3)$$

②.-

STATISKT BESTÄMT



$$\rightarrow : N_{DE} = 0$$

$$\uparrow : -R_{DE} - P = 0 \rightarrow R_{DE} = -P$$

$$\Sigma E : -M_{DE}(D) + R_{DE} \cdot L = 0 \rightarrow M_{DE}(D) = +PL$$

BEHÖVER

DB



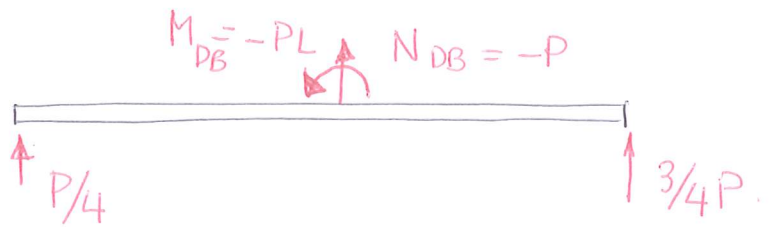
$$\uparrow : -N_{DB} - P = 0$$

$$N_{DB} = -P$$

$$\rightarrow : + R_{DB} = 0$$

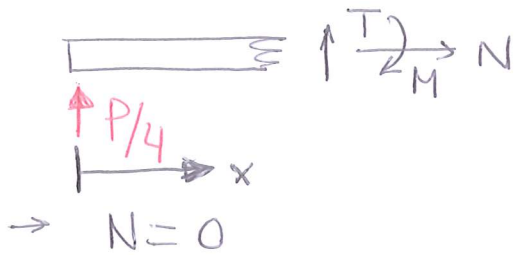
$$\Sigma D : M_{DB} = -PL$$

Del. ABC:



Del AB:

$$0 \leq x \leq 2L.$$



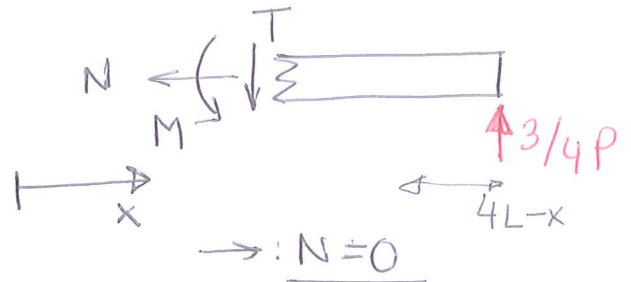
$$\uparrow: P/4 + T = 0$$

$$\underline{T = -P/4}$$

$$\circlearrowleft A: M - Tx = 0$$

$$\underline{M(x) = Tx = -\frac{Px}{4}}$$

$$2L < x \leq 4L.$$



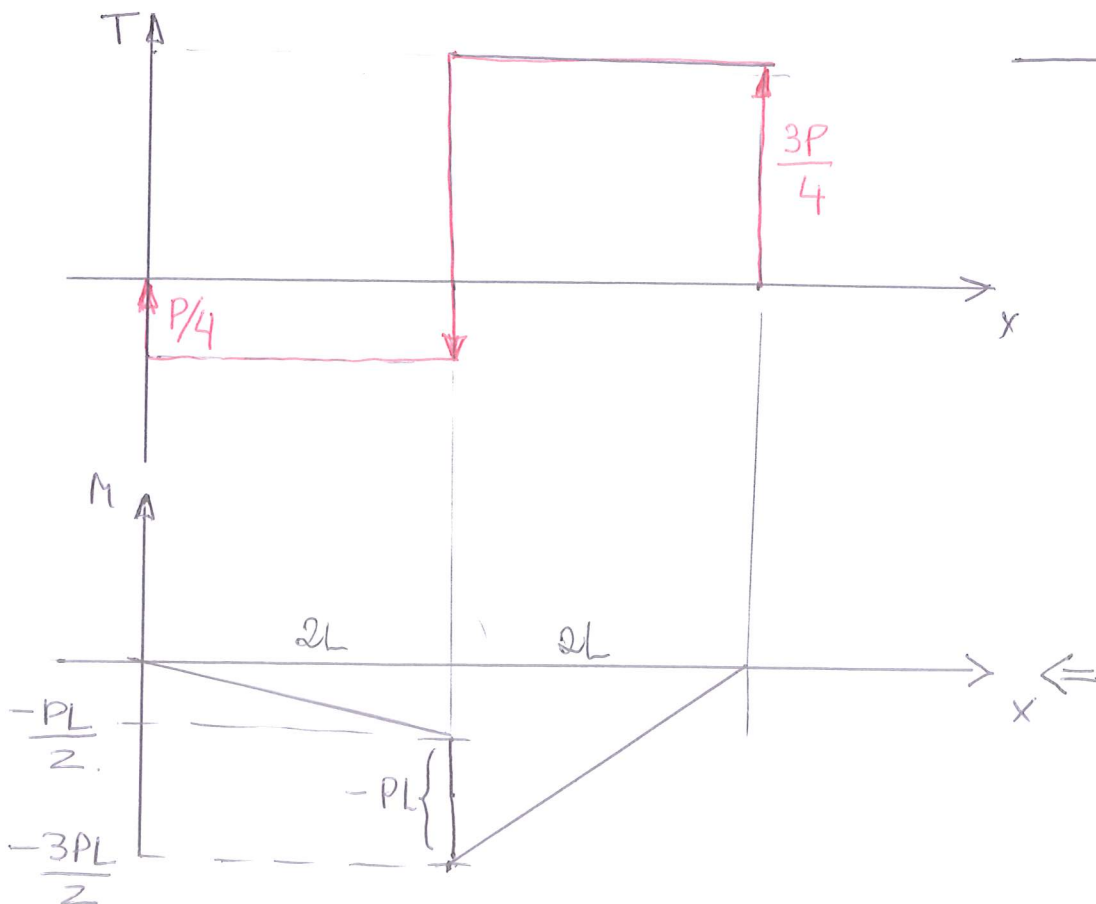
$$\uparrow: -T + 3/4P = 0$$

$$\underline{T = 3/4P}$$

$$\circlearrowleft C: -M - T(4L - x) = 0$$

$$M = -T(4L - x)$$

$$\underline{M = -\frac{3}{4}P(4L - x)}$$



Glöm inte  
Momentet!