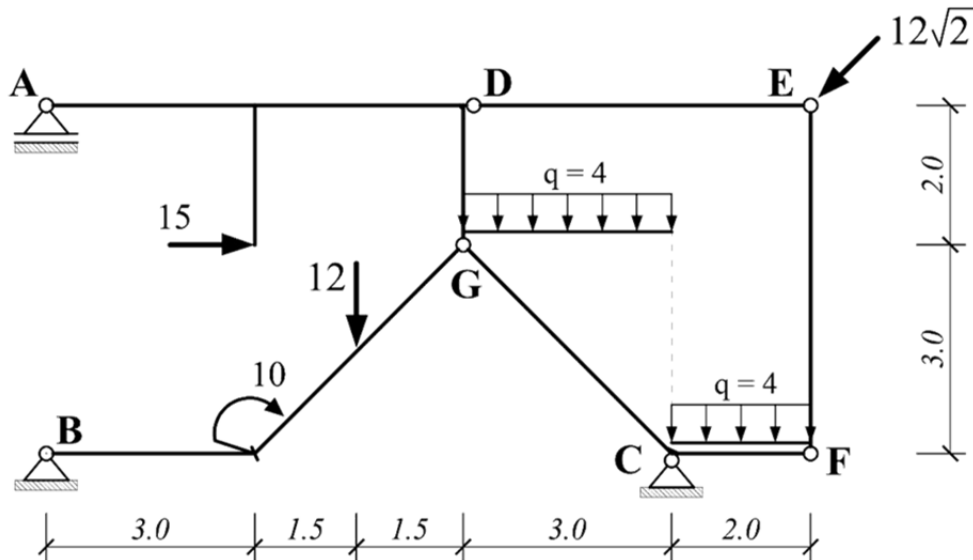


НАЦРТАТИ ДИЈАГРАМЕ СИЛА У ПРЕСЕКУ ЗА ПРИКАЗАНЕ НОСАЧЕ

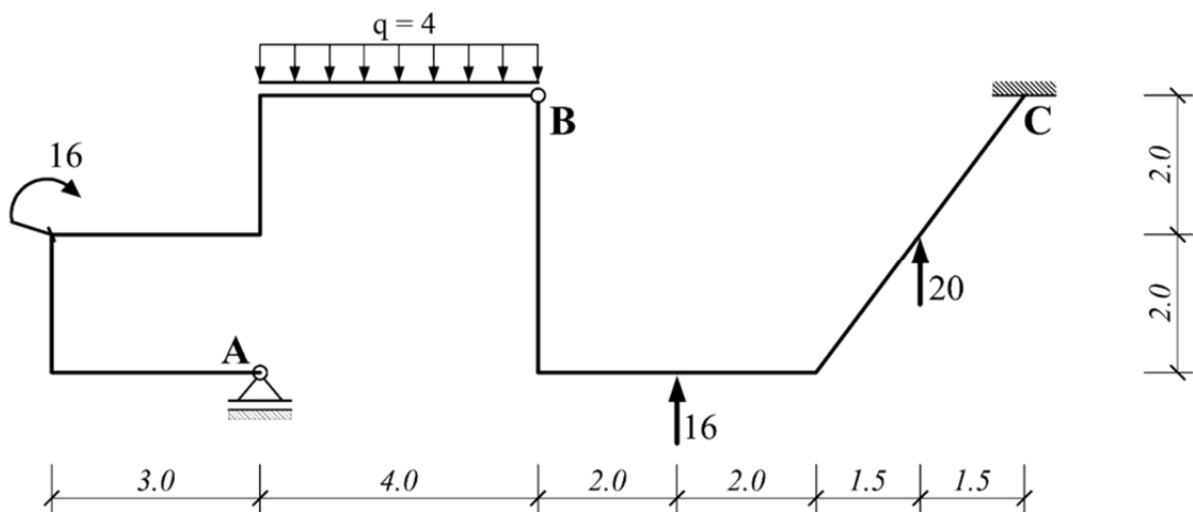
ГРУПА **A**

Време предвиђено
за израду испита:
2 сата и 15 минута

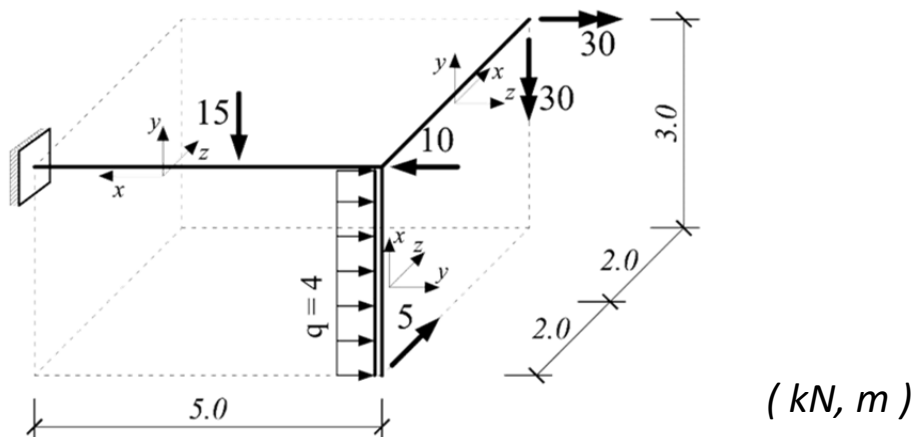
1.
(41%)



2.
(36%)

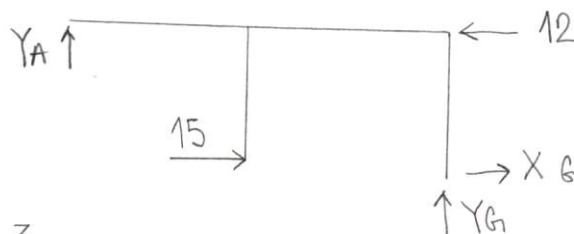
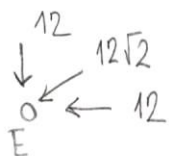
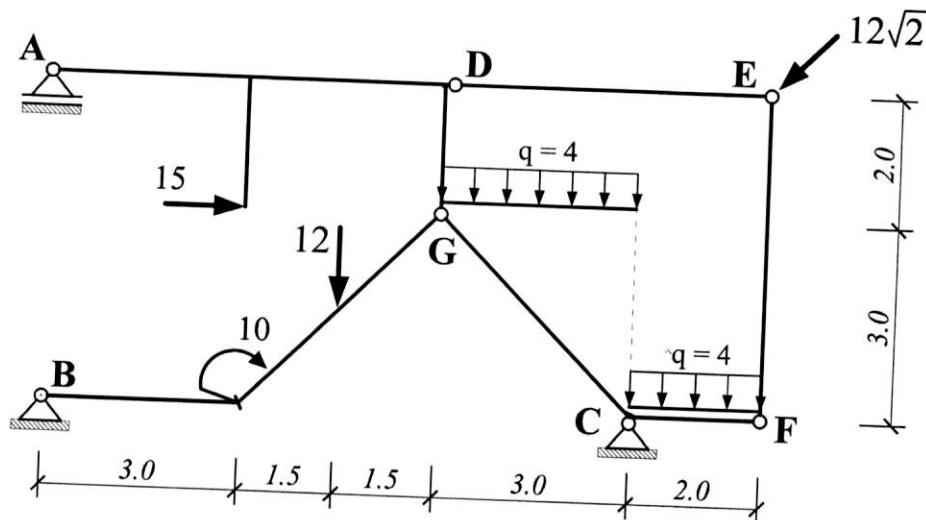


3.
(23%)



(kN, m)

НАПОМЕНА: Услов за полагање писменог дела испита је: » минимум 50% укупног броја поена,
» минимум 50% тачан дијаграм момената у 1. или 2 зад.



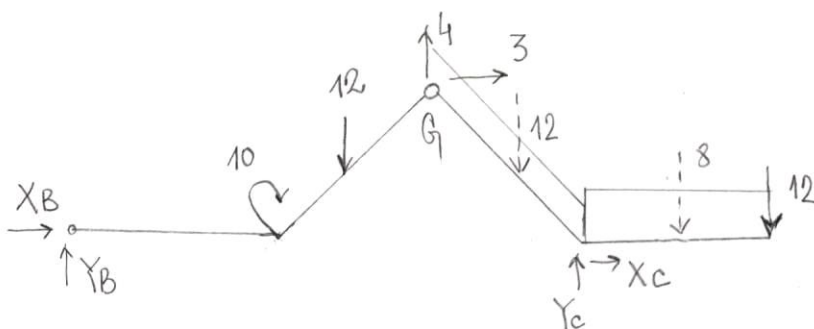
$$\sum M_G = 0:$$

$$YA \cdot G - 12.2 = 0$$

$$Y_A = 4$$

YG-4

$$X_G = -3$$



$$\sum M_B = 0:$$

$$10 + 12 \cdot 4,5 - 4 \cdot 6 + 3 \cdot 3 + 12 \cdot 7,5 + 8 \cdot 10 + 12 \cdot 11 - Y_C \cdot 9 = 0 \Rightarrow Y_C = 39$$

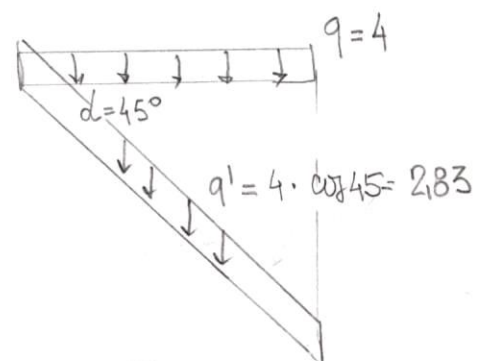
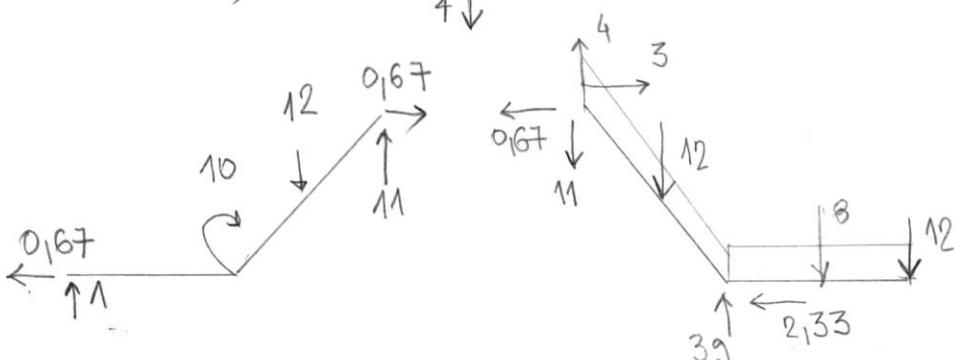
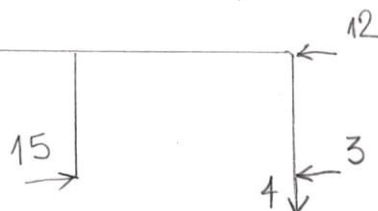
$$\sum Y = 0 \Rightarrow Y_B = 1$$

$$\sum M_G^L = 0: -12 \cdot 1,5 + 10 \cdot X_B \cdot 3 + Y_B \cdot 6 = 0$$

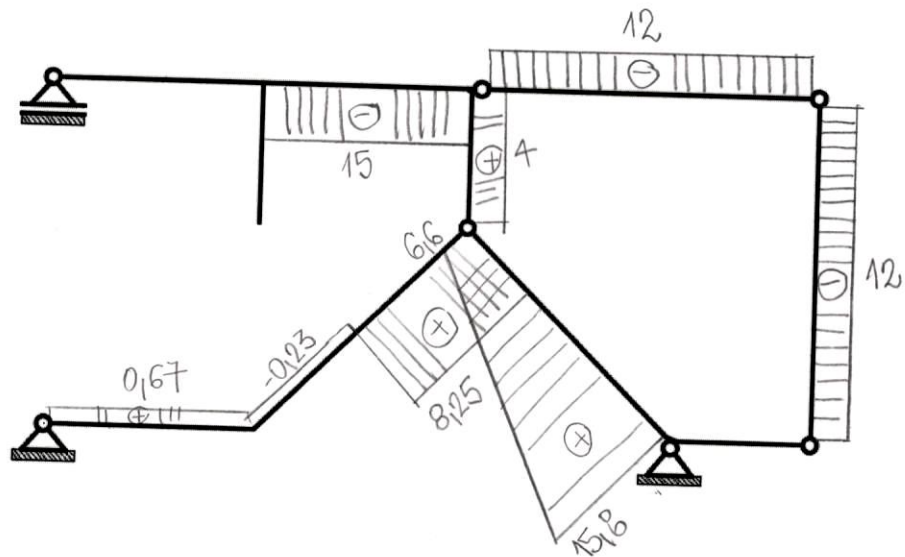
$$X_B = -0,67$$

$$\leq X \Rightarrow X_C = -2,33$$

РЕКАПИТУЛАЦИЈА

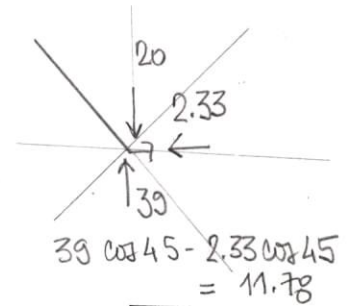
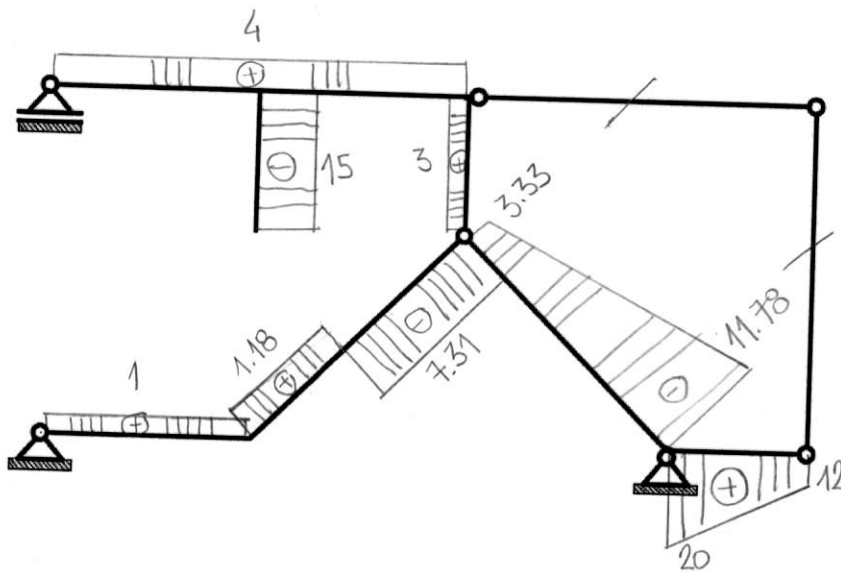


9



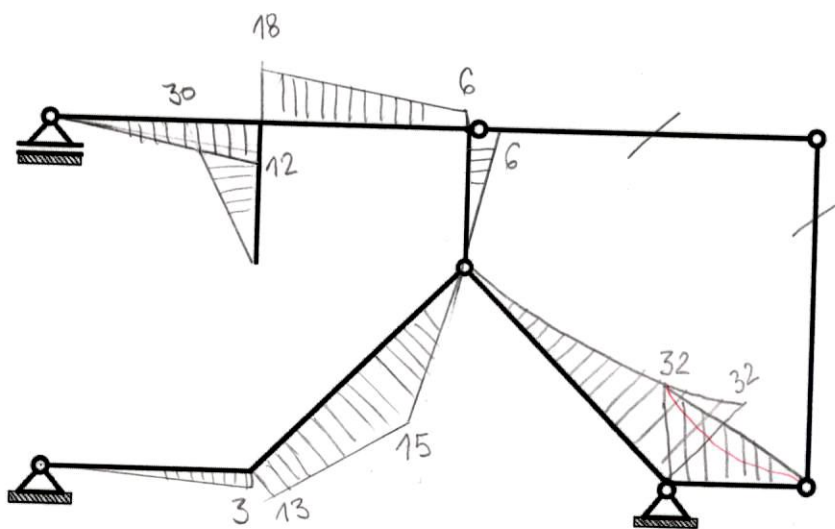
8

N



T

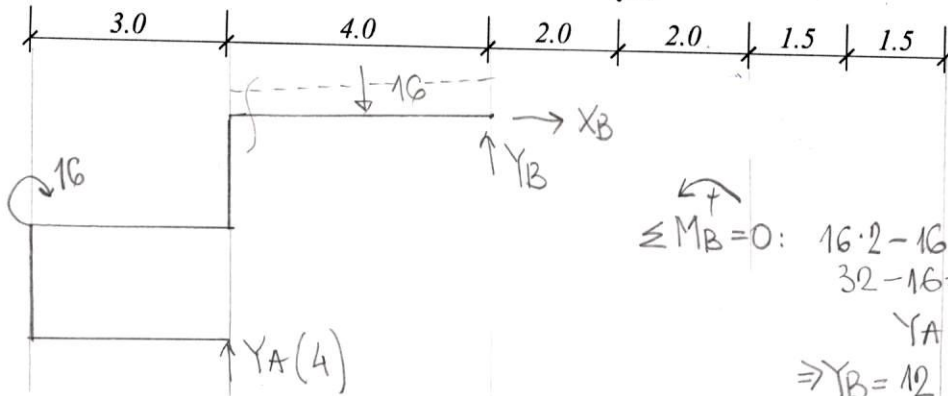
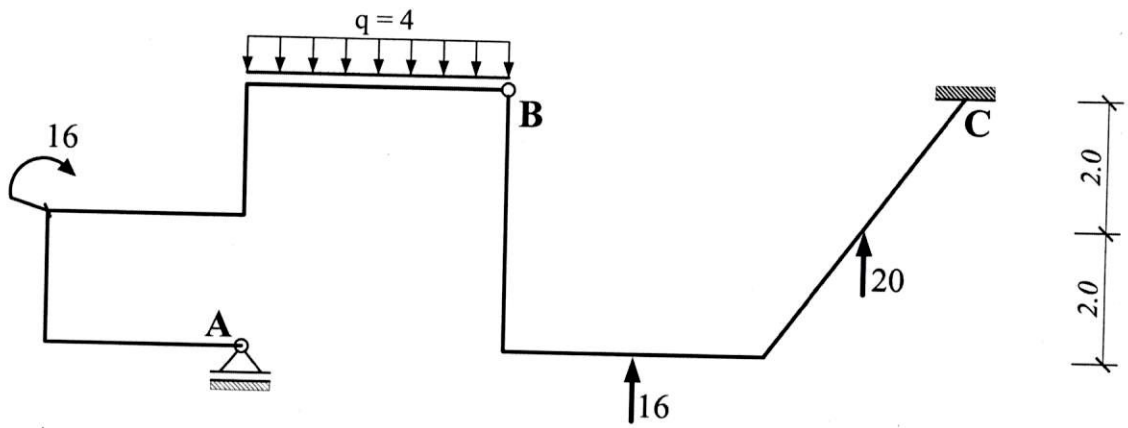
8



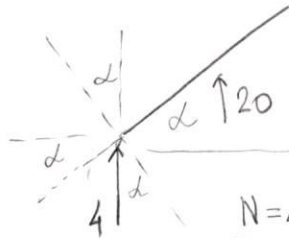
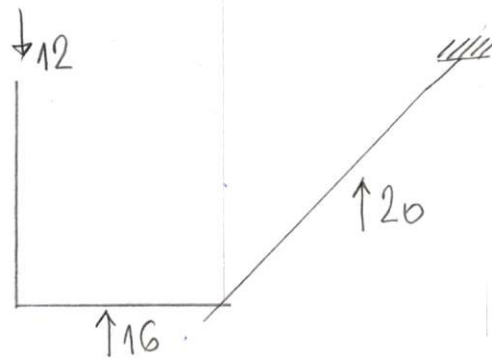
16

M

2.



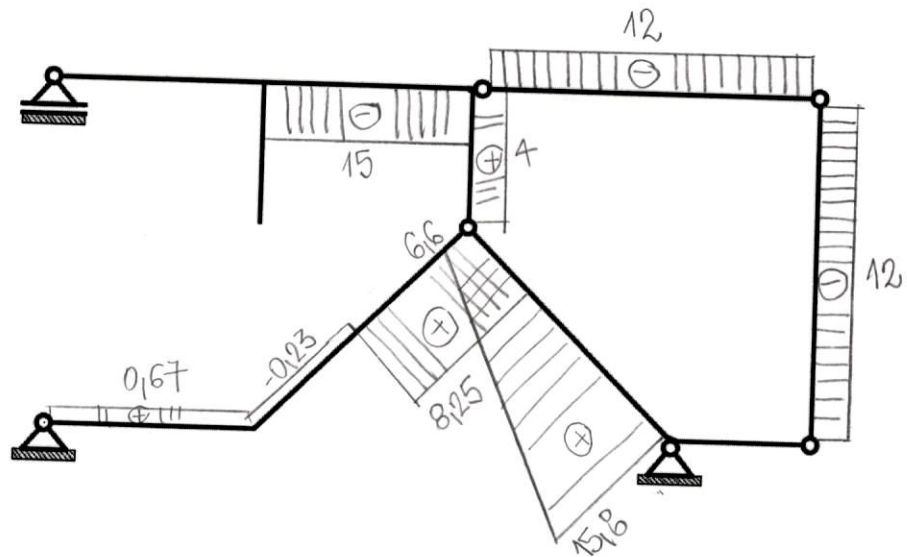
$$\begin{aligned} \sum M_B = 0: & 16 \cdot 2 - 16 - Y_A \cdot 4 = 0 \\ & 32 - 16 = 4Y_A \\ & Y_A = 4 \\ \Rightarrow Y_B = 12 & (\sum F_y = 0) \\ \Rightarrow X_B = 0 & (\sum F_x = 0) \end{aligned}$$



$$\begin{aligned} \sin \alpha &= \frac{4}{5} = 0.8 \\ \cos \alpha &= \frac{3}{5} = 0.6 \end{aligned}$$

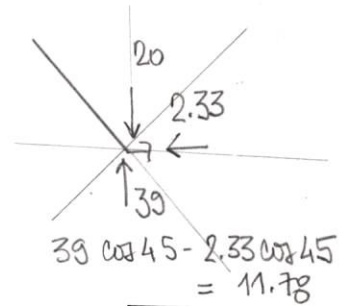
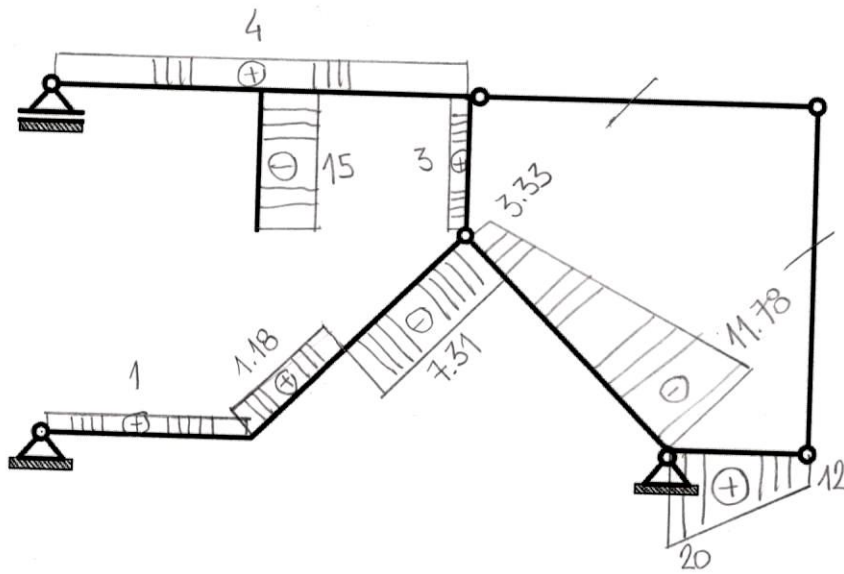
$$\begin{aligned} N &= 4 \sin \alpha \\ T &= 4 \cos \alpha \end{aligned}$$

6



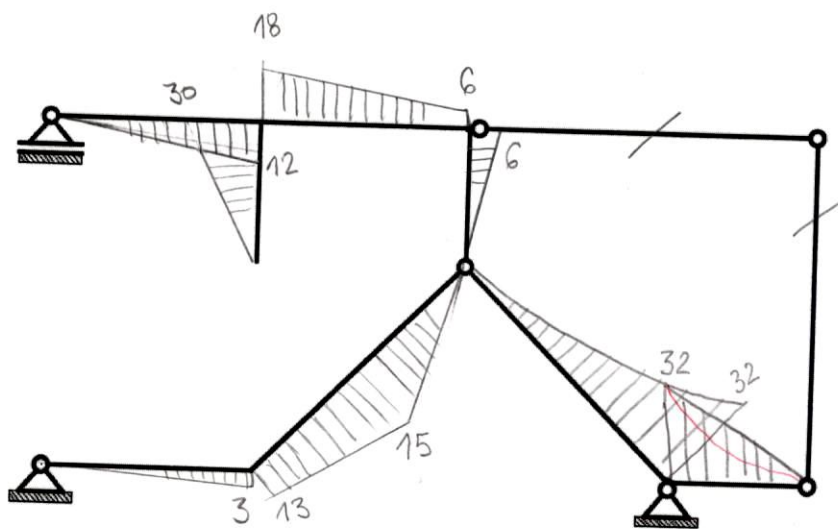
8

N



T

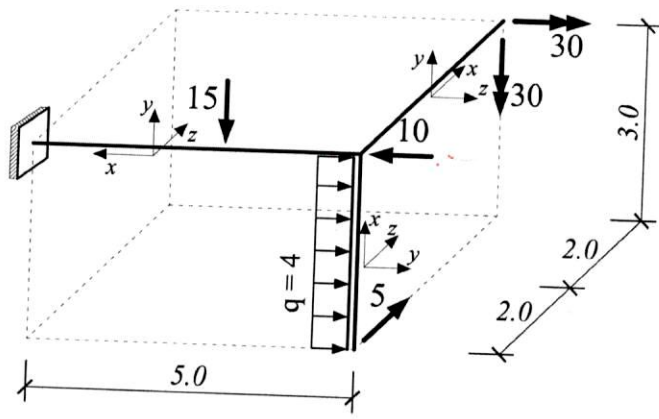
8



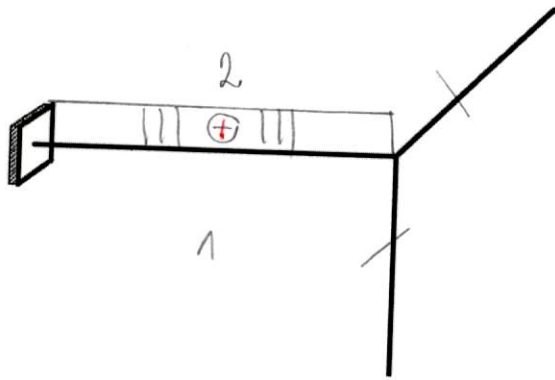
16

M

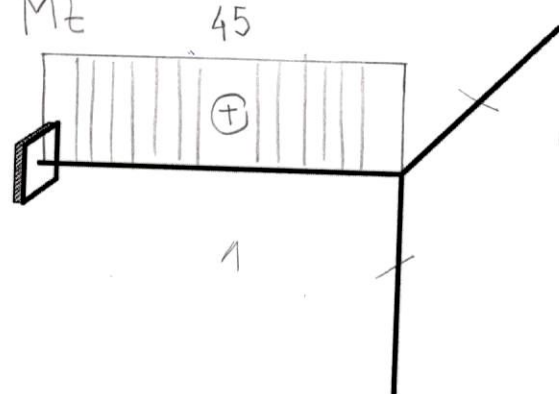
3.



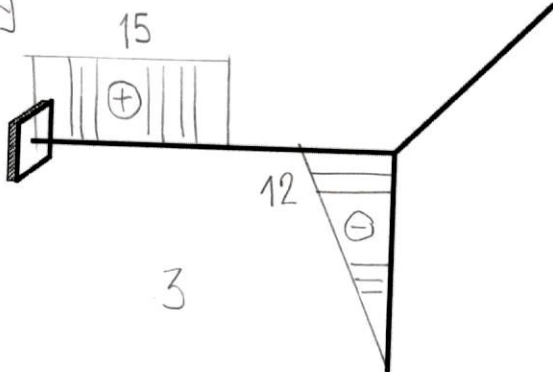
N



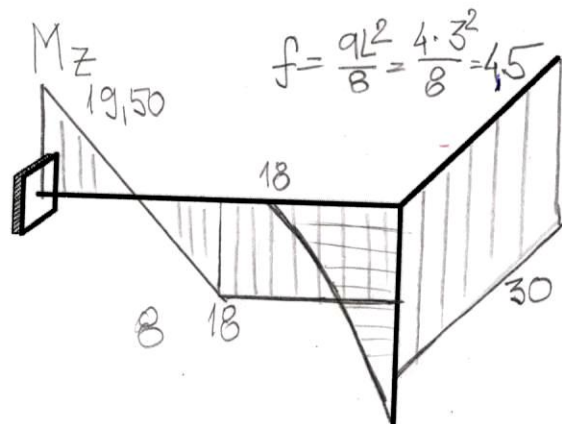
M_t



T_y

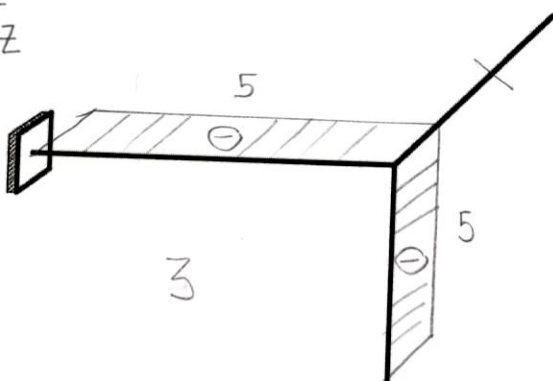


M_z



$$f = \frac{qL^2}{8} = \frac{4 \cdot 3^2}{8} = 4.5$$

T_z



M_y

