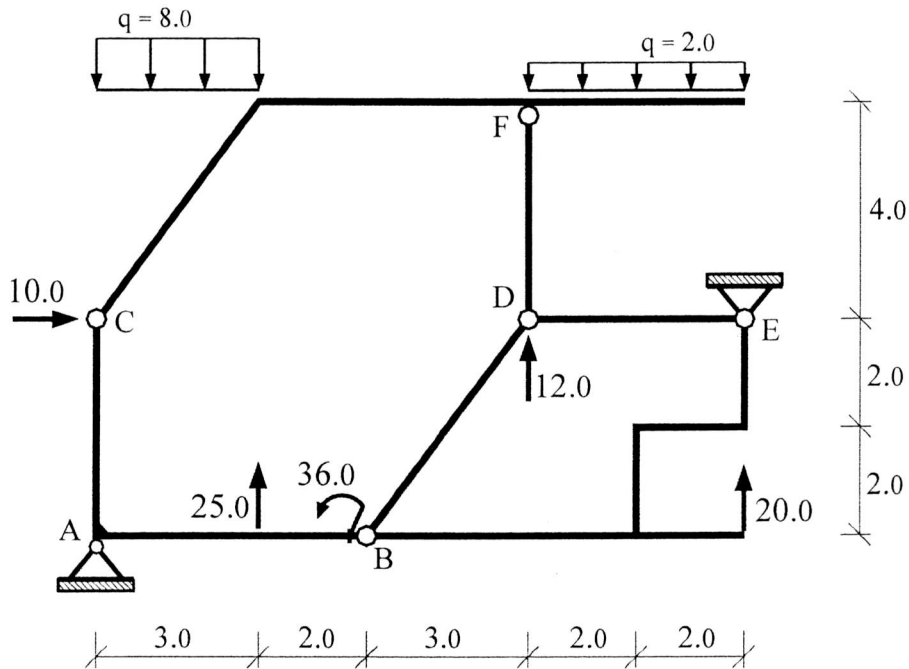


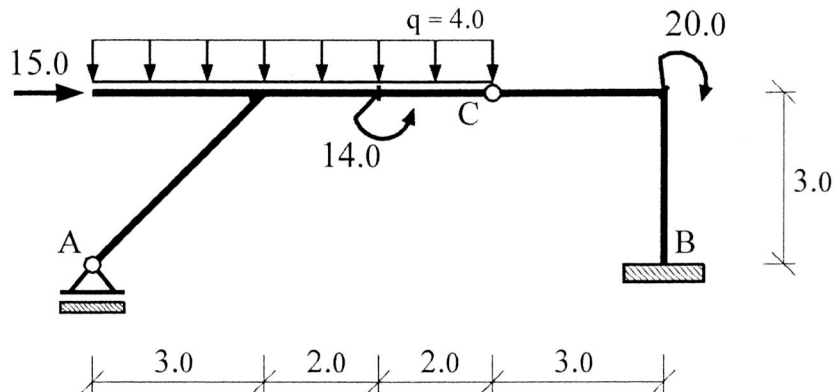
НАЦРТАТИ ДИЈАГРАМЕ СИЛА У ПРЕСЕКУ ЗА ПРИКАЗАНЕ НОСАЧЕ

ГРУПА **A**

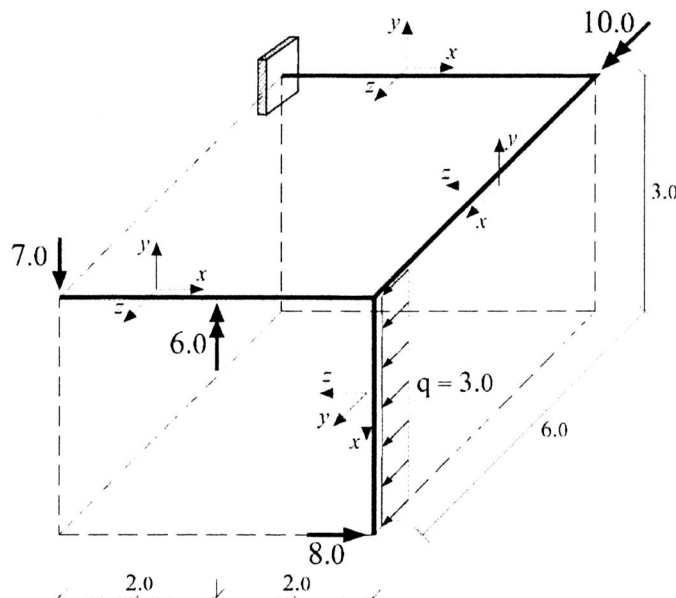
1.
(45%)



2.
(30%)



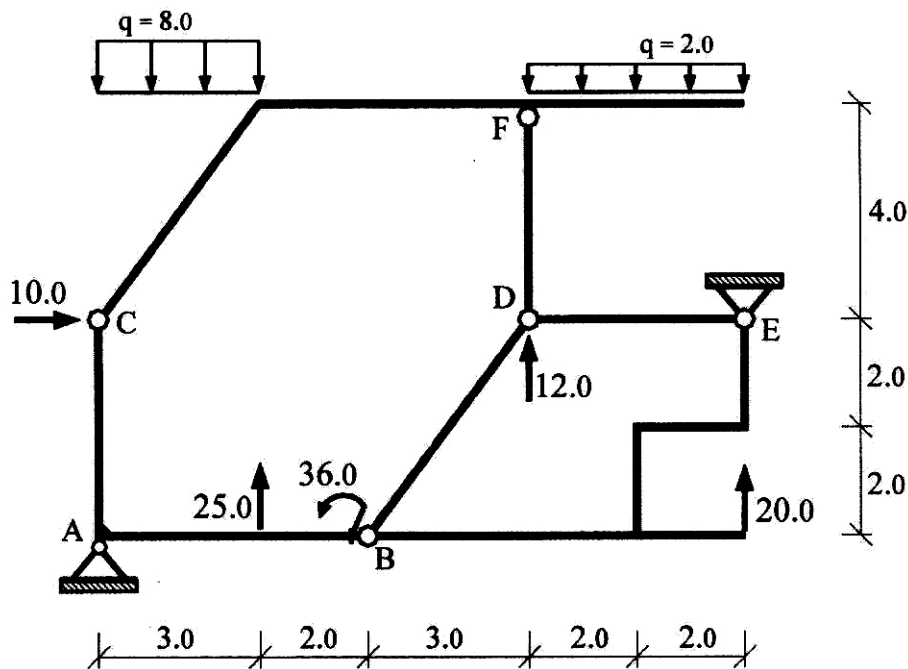
3.
(25%)



(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.

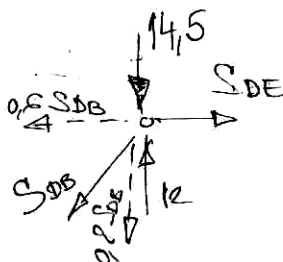


$$\Sigma F_D = -14,5$$

$$\sum F_y = 0: y_c = 24 + 8 - 14,5 =$$

$$y_c = 17,5$$

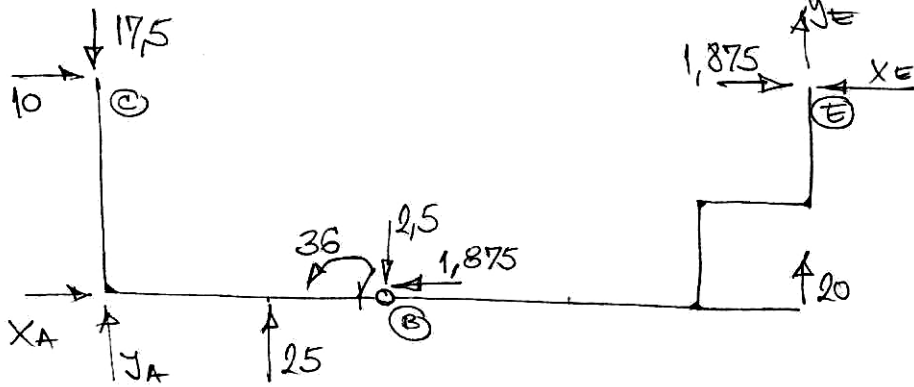
* 4BOP D:



$$\sum F_y = 0: 0,8 S_{AB} + 14,5 - 12 = 0 \rightarrow \boxed{S_{AB} = -3,125}$$

$$\sum F_x = 0 \Rightarrow -0,6 S_{DB} + S_{DE} = 0 \Rightarrow \boxed{S_{DE} = -1,875}$$

*Δα C-A-B-E:



$$\sum M_B = 0: Y_A \cdot 5 + 10 \cdot 4 - 17.5 \cdot 5 + 25 \cdot 2 - 36 = 0$$

$$\boxed{Y_A = 6.7}$$

$$\sum F_y = 0: Y_A + Y_E - 17.5 + 25 - 2.5 + 20 = 0$$

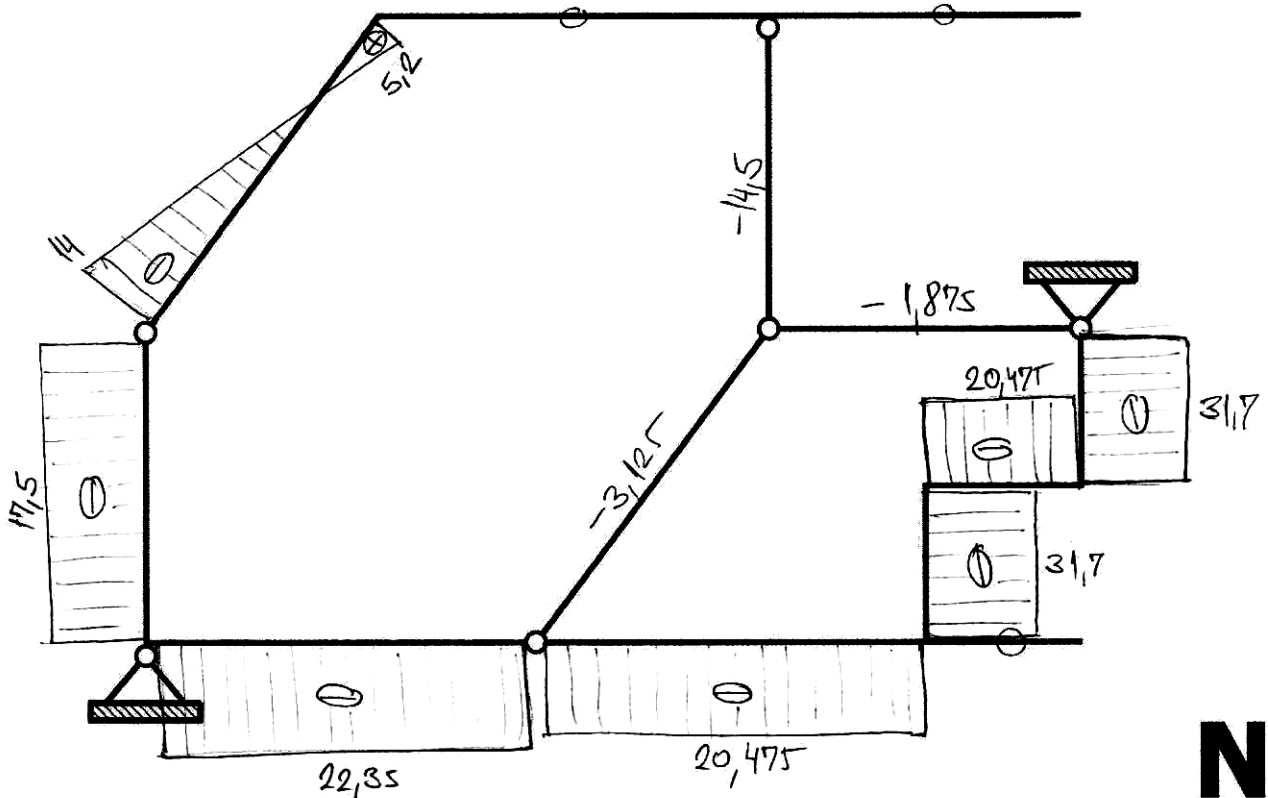
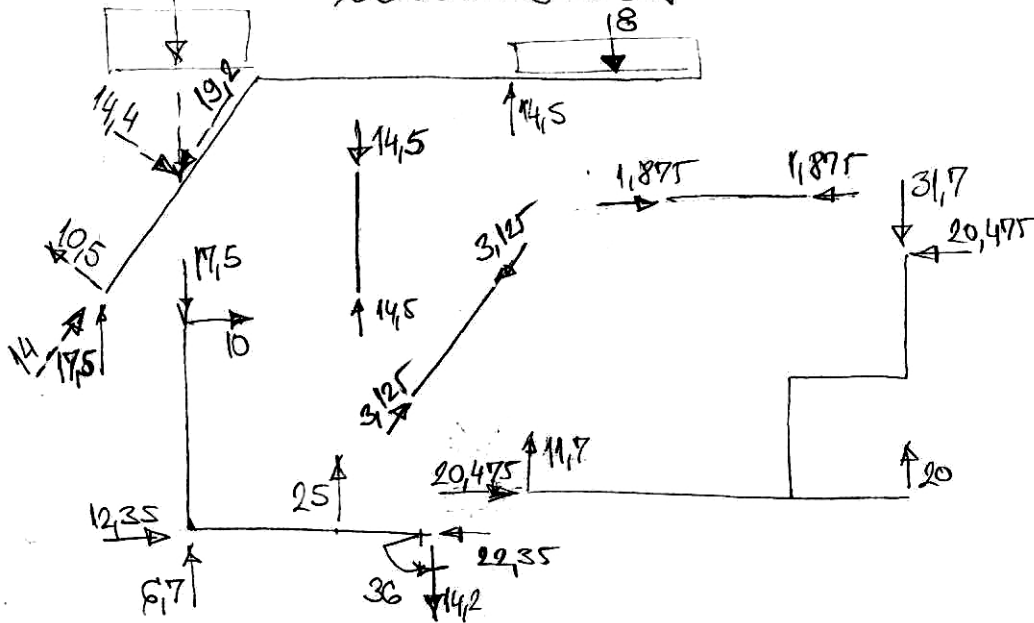
$$\boxed{Y_E = -31.7}$$

$$\sum M_C = 0: X_A \cdot 4 + 25 \cdot 3 + 36 - 25 \cdot 5 - 1.875 \cdot 4 + 20 \cdot 12 + Y_E \cdot 12 = 0$$

$$(-31.7) \quad \boxed{X_A = 12.35}$$

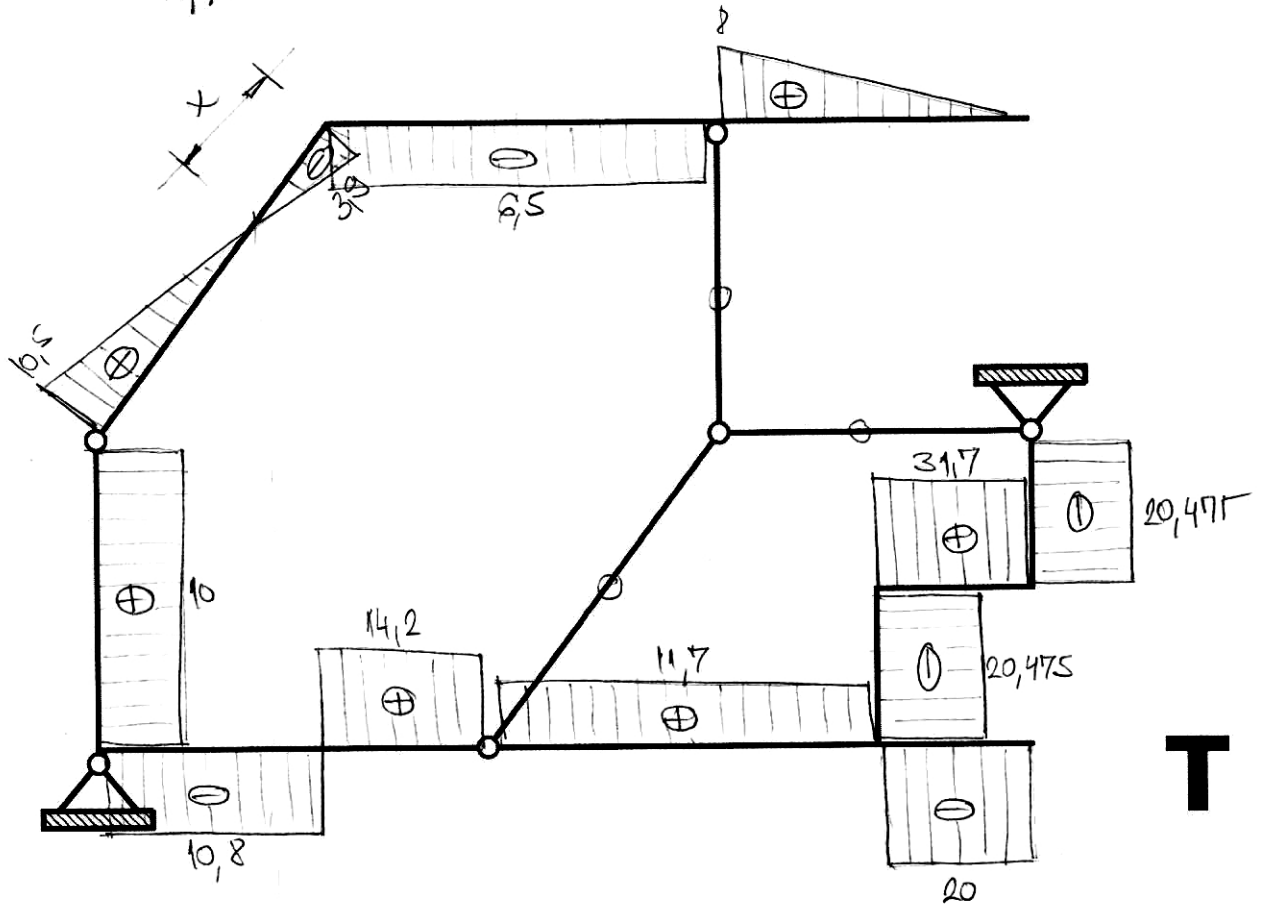
$$\sum F_x = 0: \boxed{X_E = 22.35}$$

* РЕКАПУТУЛАЦИЈА *

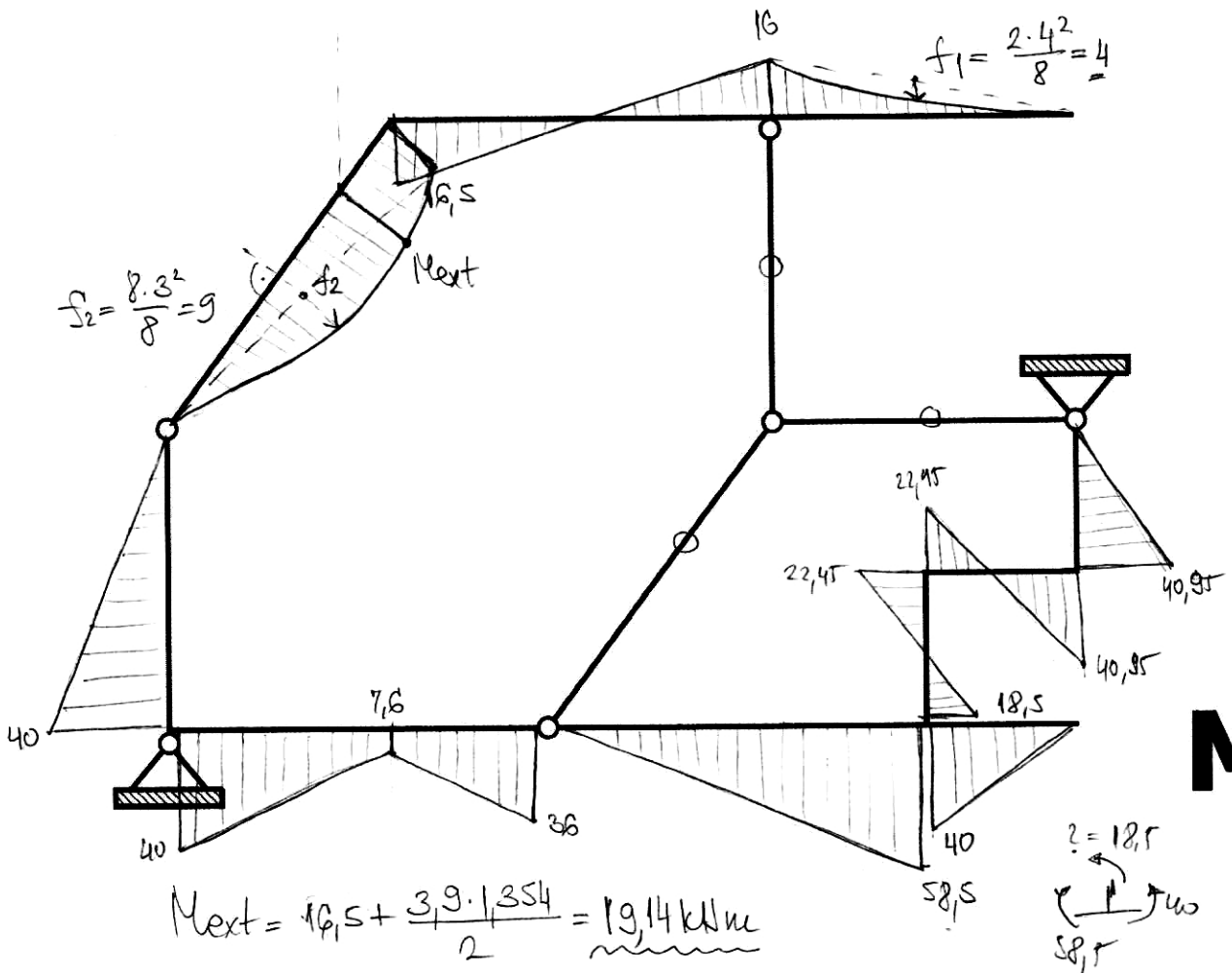


N

$$x = \frac{3,9}{14,5} = 1,354$$

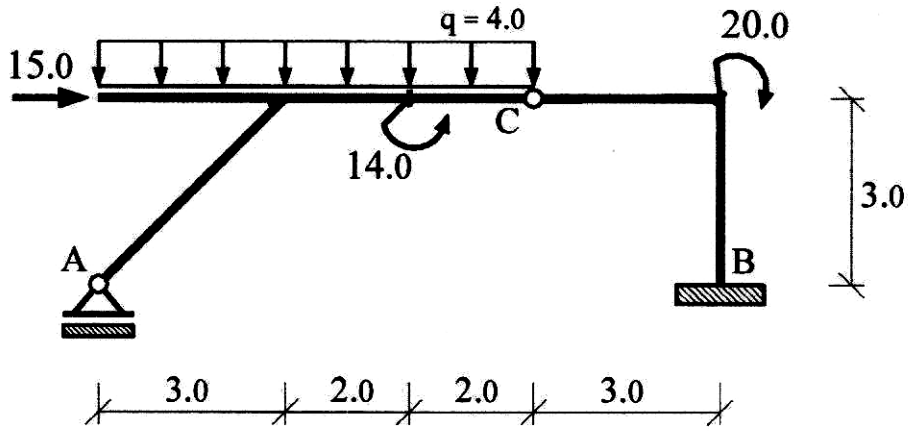


T

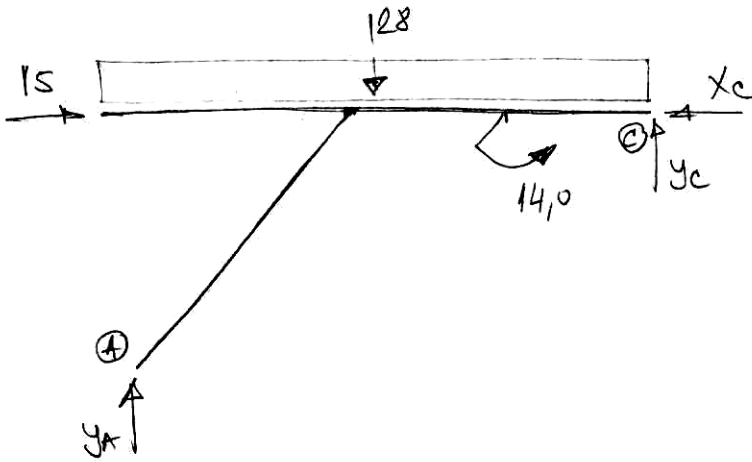


M

2.



* Аес А - С:



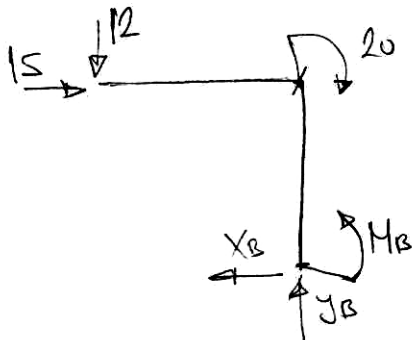
$$\sum F_x = 0: X_C = 15$$

$$\sum M_A = 0: Y_C \cdot 7 - 28 \cdot 3.5 + 14 - 15 \cdot 3 = 0$$

$$Y_C = 12$$

$$\sum F_y = 0: Y_A = 16$$

* Аес С - В:



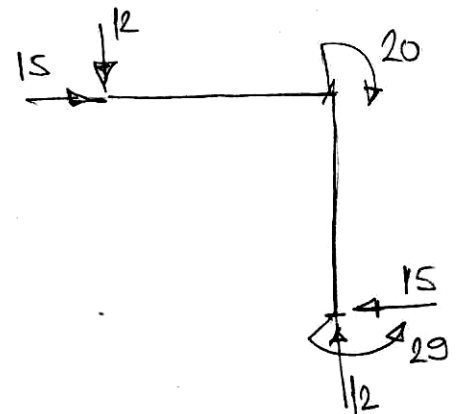
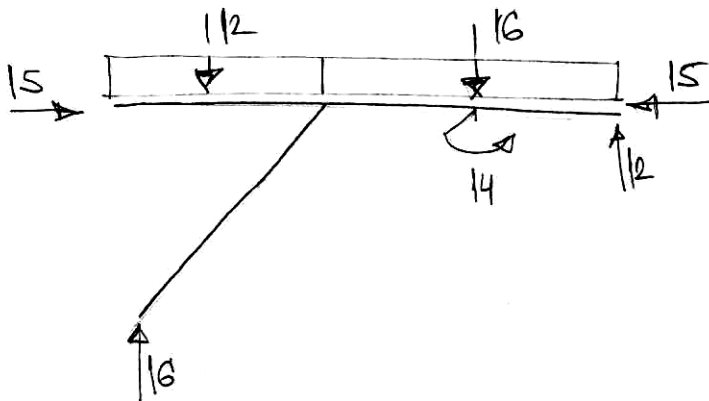
$$\sum F_x = 0: X_B = 15$$

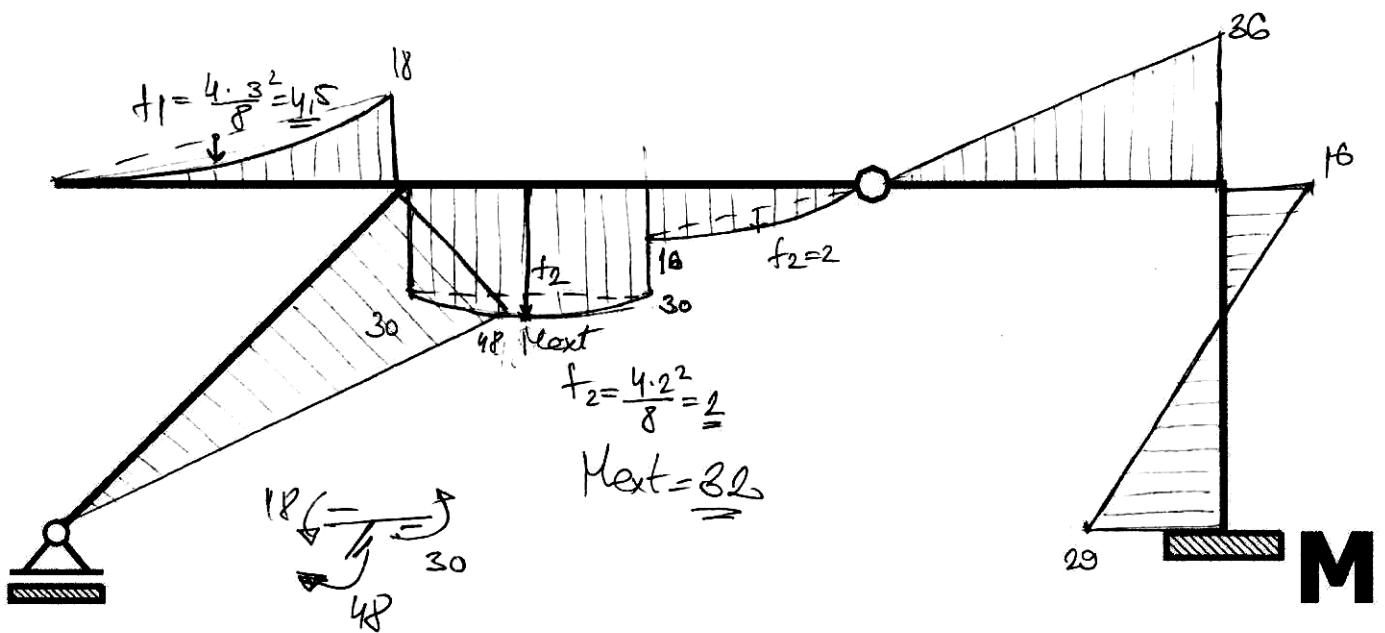
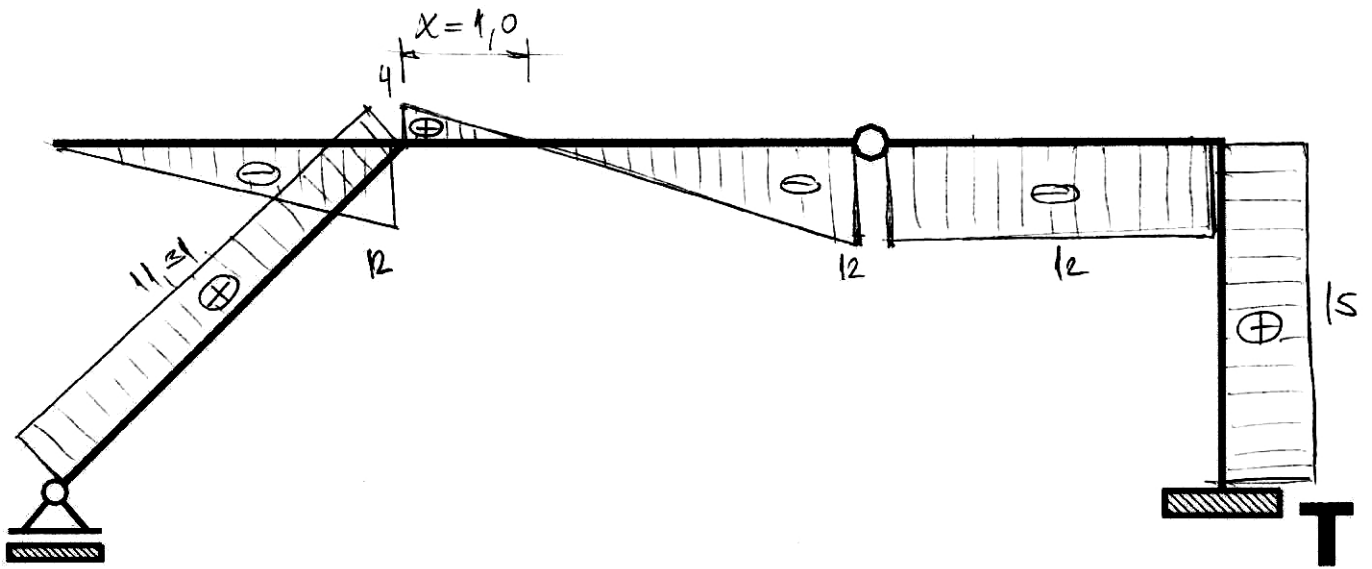
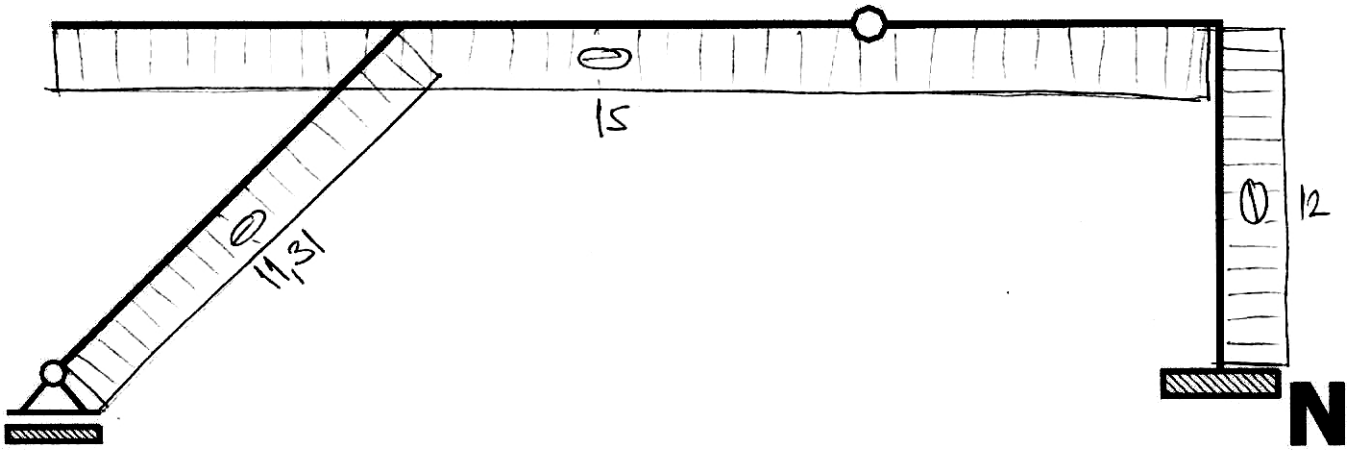
$$\sum F_y = 0: Y_B = 12$$

$$\sum M_B = 0: M_B - 20 + 12 \cdot 3 - 15 \cdot 3 = 0$$

$$M_B = 29$$

* РЕКАВИТУЛАЦИЯ





3.

