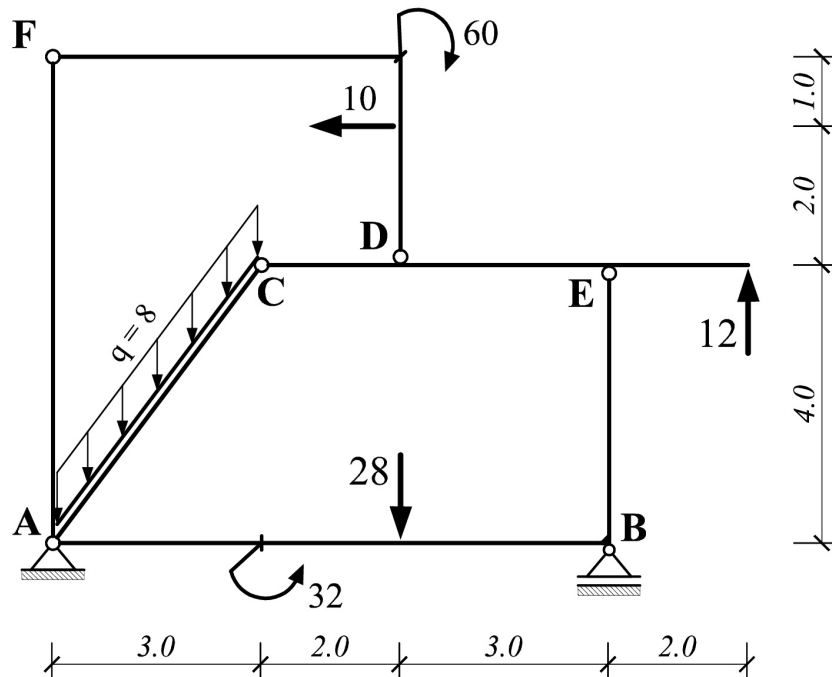


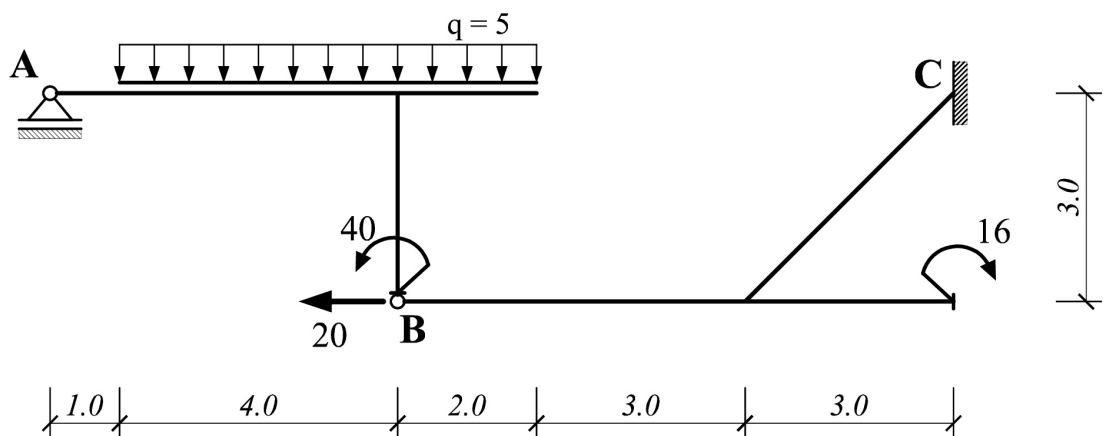
НАЦРТАТИ ДИЈАГРАМЕ СИЛА У ПРЕСЕКУ ЗА ПРИКАЗАНЕ НОСАЧЕ

ГРУПА **A**

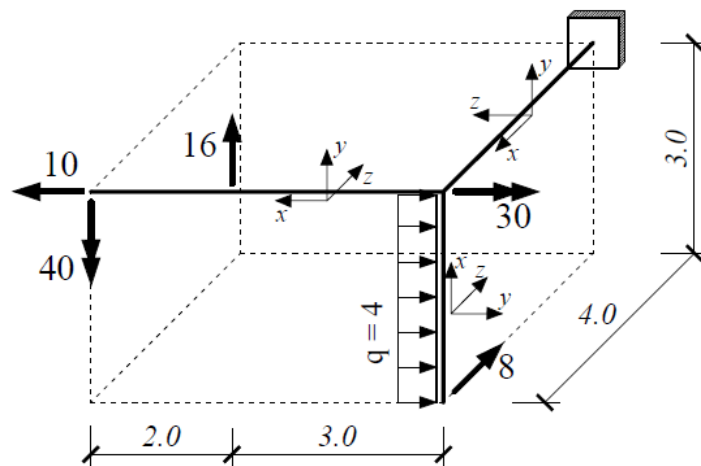
1.
(40%)



2.
(38%)



3.
(22%)



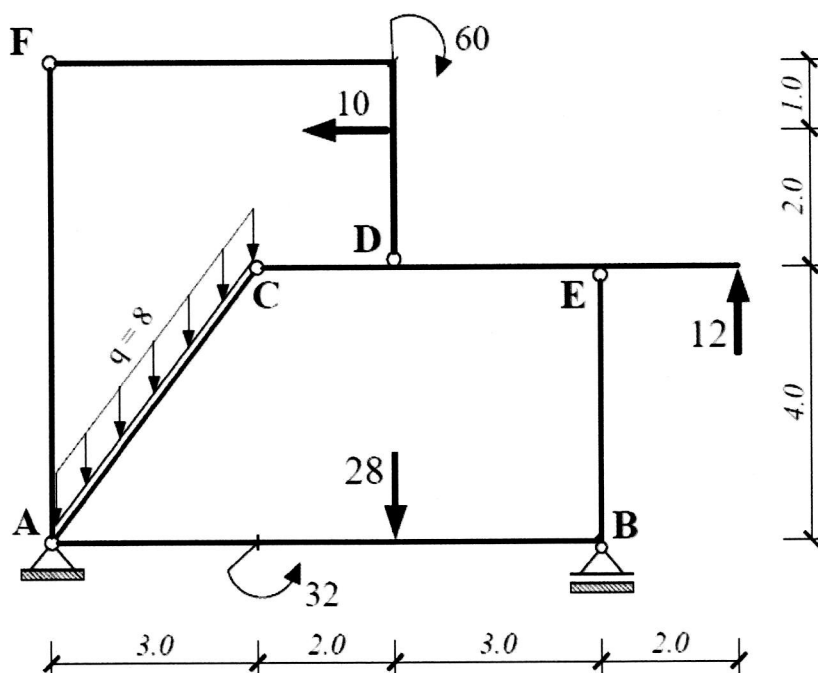
(kN, m)

НАПОМЕНА: Услов за полагање писменог дела испита је:

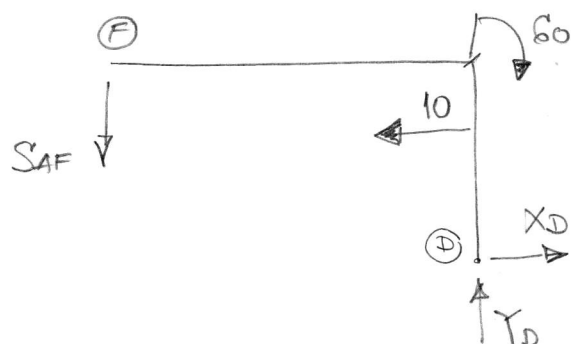
» минимум 50% укупног броја поена,

» минимум 50% тачан дијаграм момената у 1. или 2. зад.

1.



* Δeo A-F-D:



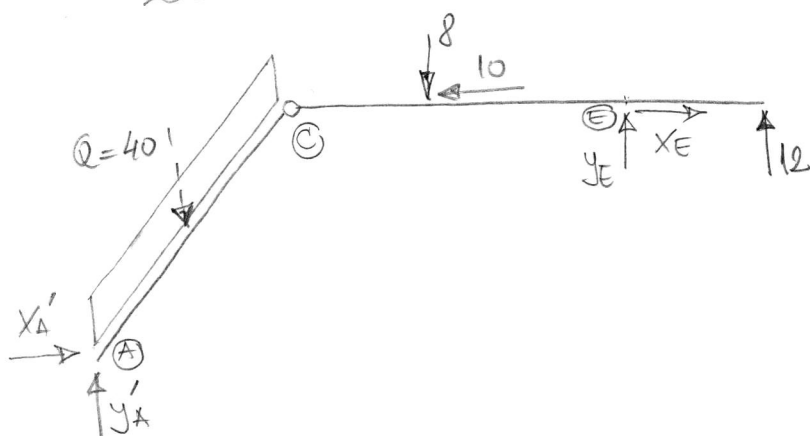
$$\sum F_x = 0: X_D = 10$$

$$\sum M_D^+ = 0: S_{AF} \cdot 5 + 10 \cdot 2 - 60 = 0$$

$$S_{AF} = 8$$

$$\sum F_y = 0: Y_D = 8$$

* Δeo A-C-E:



$$\sum M_C^{desno +} = 0: Y_E \cdot 5 - 8 \cdot 2 + 12 \cdot 7 = 0$$

$$Y_E = -13,6$$

$$\sum F_y = 0: Y'_A + Y_E - 40 - 8 + 12 = 0$$

$$Y'_A = 49,6$$

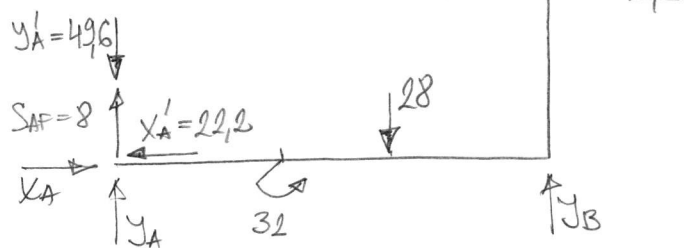
$$\sum M_A^+ = 0: Y_E \cdot 8 - X_E \cdot 4 - 40 \cdot 1,5 - 8 \cdot 5 + 10 \cdot 4 + 12 \cdot 10 = 0$$

$$X_E = -12,2$$

$$\sum F_x = 0: X'_A + X_E - 10 = 0$$

$$X'_A = 22,2$$

* Δeo A-B-E:



$$\sum F_x = 0: X_A = 10$$

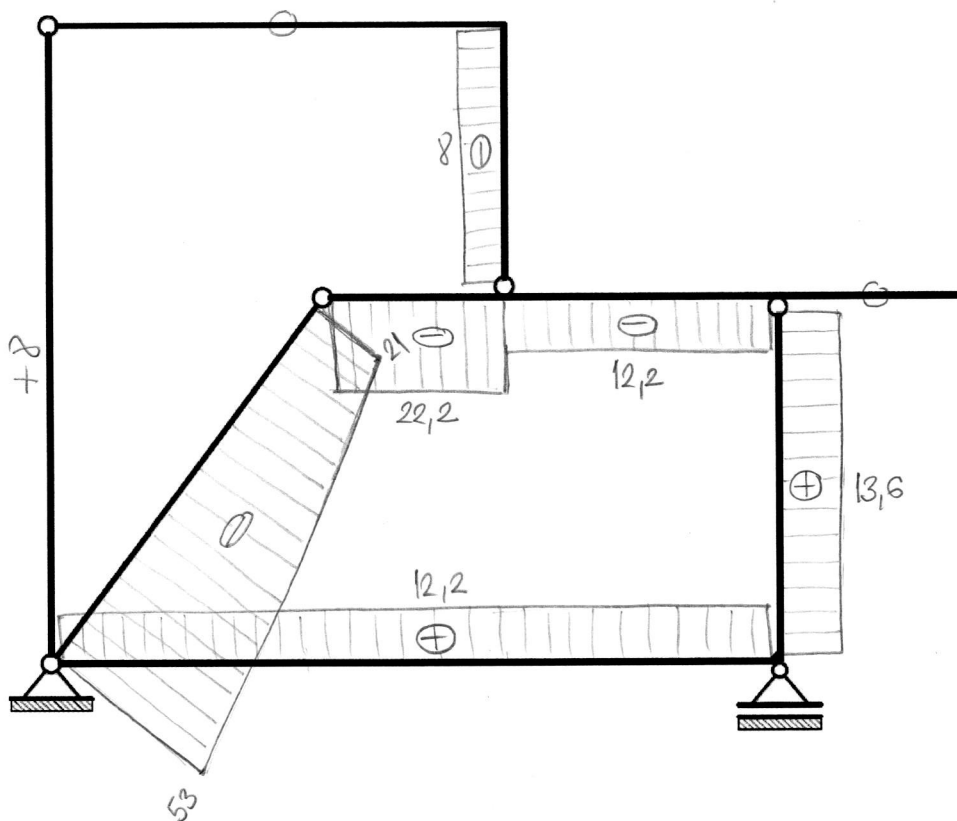
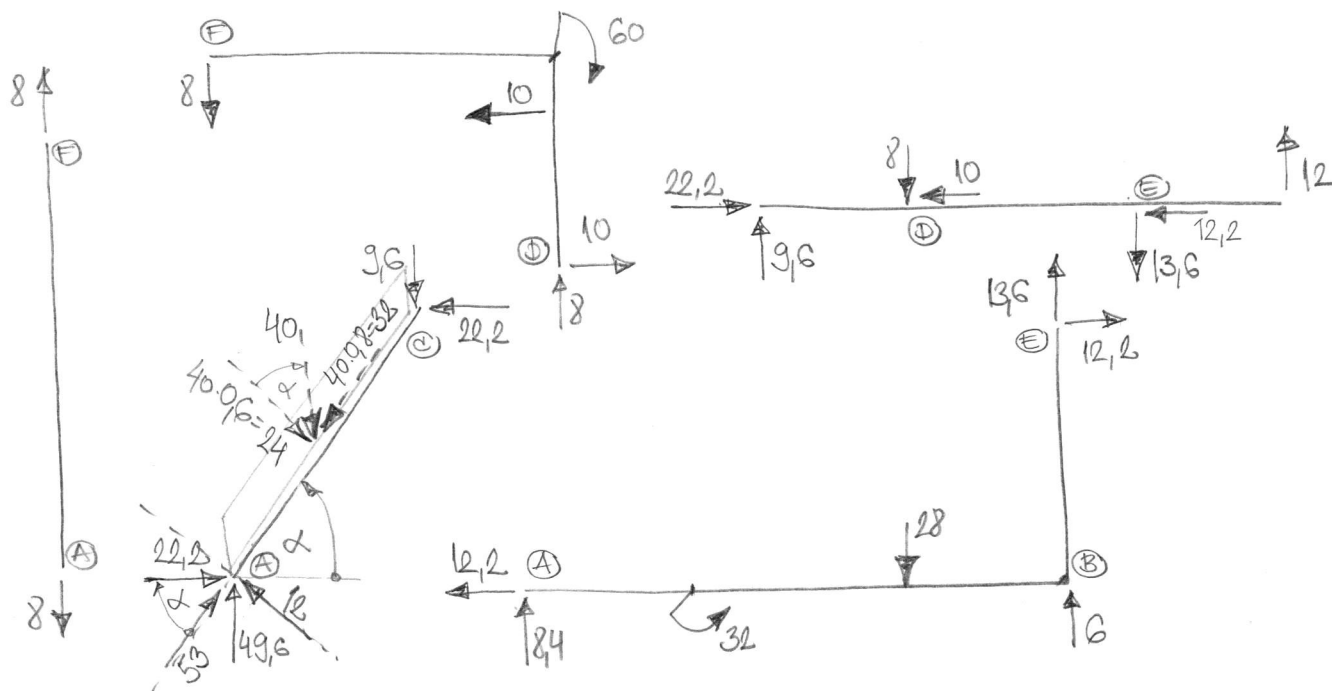
$$\sum M_A^+ = 0: Y_B \cdot 8 - 28 \cdot 5 + 13,6 \cdot 8 - 12,2 \cdot 4 + 32 = 0$$

$$Y_B = 6$$

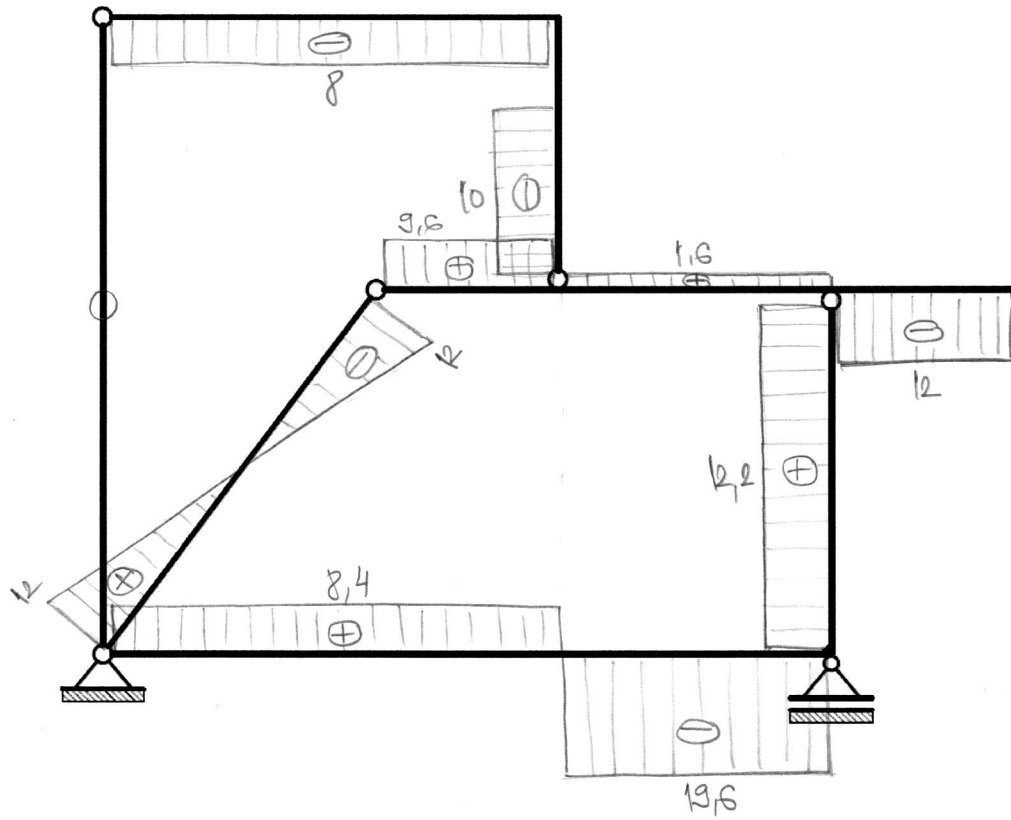
$$\sum F_y = 0: Y_A + Y_B - 49,6 + 8 - 28 + 13,6 = 0$$

$$Y_A = 50$$

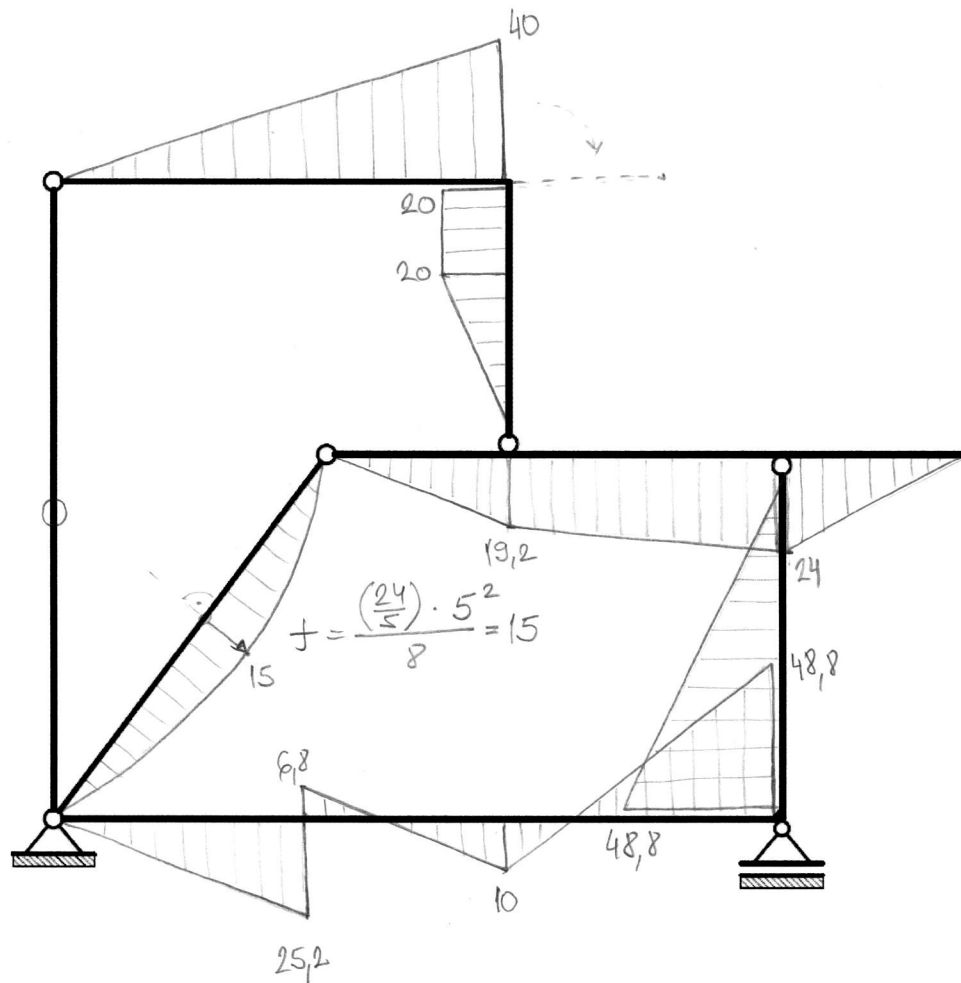
* рекапитулација *



N

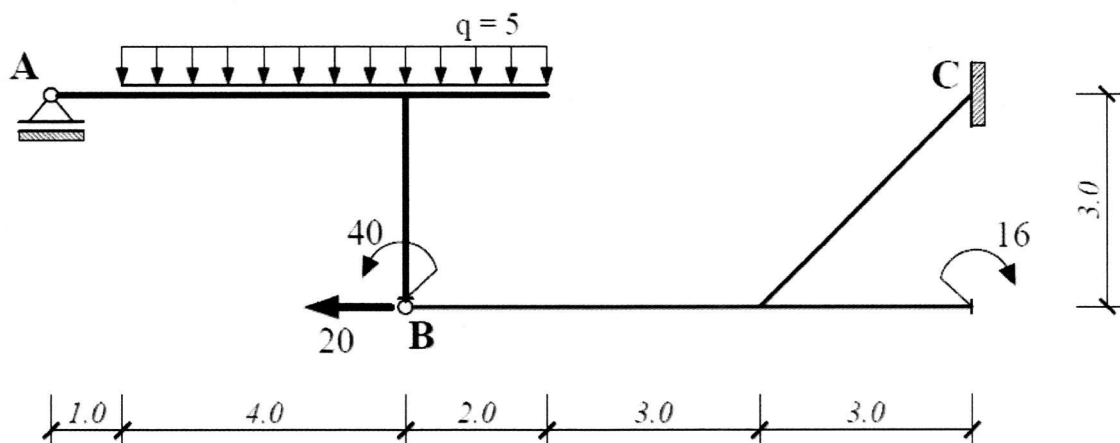


T

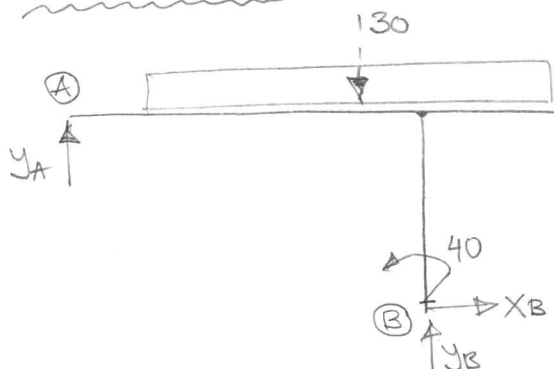


M

2.



* Δεσ A-B:



$$\sum F_x = 0: \boxed{X_B = 0}$$

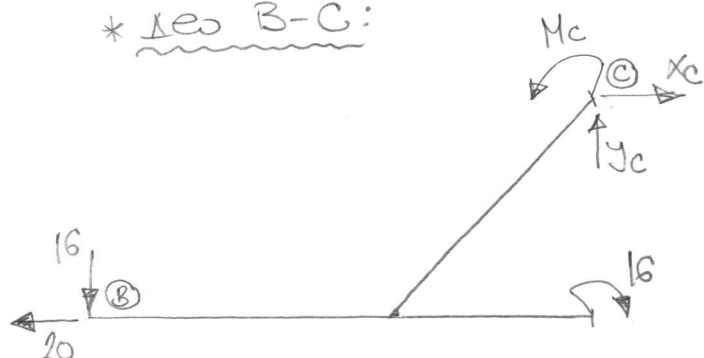
$$\sum M_B^+ = 0: Y_A \cdot 5 - 30 \cdot 1 - 40 = 0$$

$$\boxed{Y_A = 14}$$

$$\sum F_y = 0: Y_A + Y_B - 30 = 0$$

$$\boxed{Y_B = 16}$$

* Δεσ B-C:



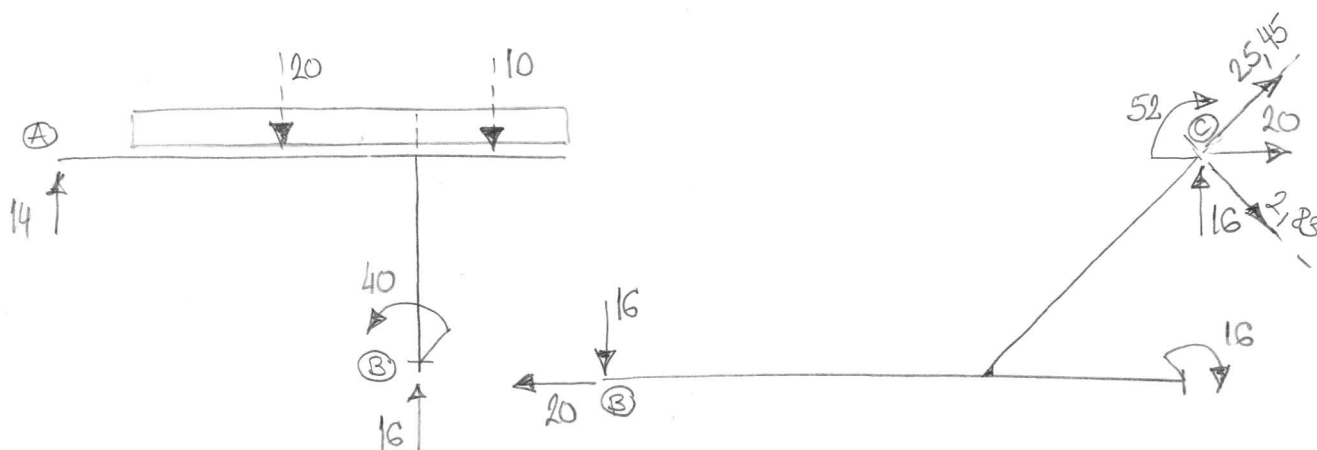
$$\sum F_x = 0: \boxed{X_C = 20}$$

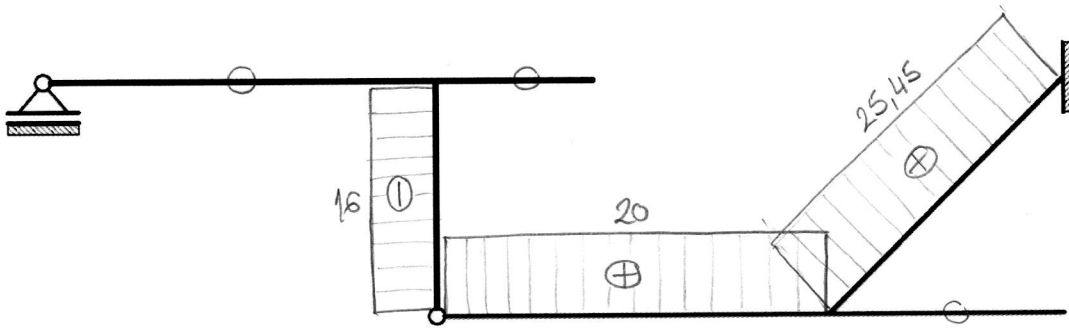
$$\sum F_y = 0: \boxed{Y_C = 16}$$

$$\sum M_C^+ = 0: M_C + 16 \cdot 8 - 20 \cdot 3 - 16 = 0$$

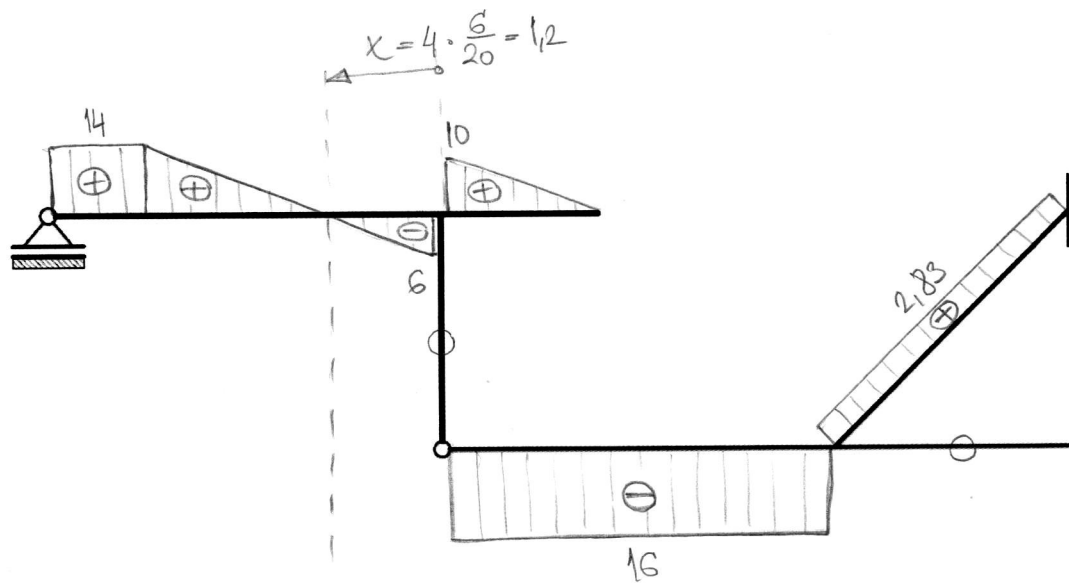
$$\boxed{M_C = -52}$$

* ρεκαπιτυλατιζα *

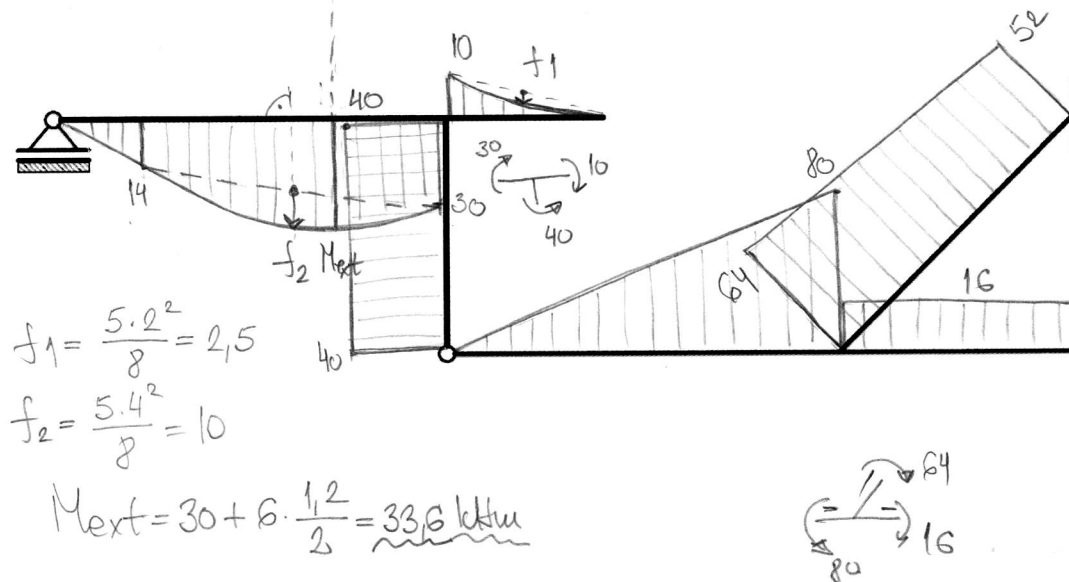




N



T



M

3.

