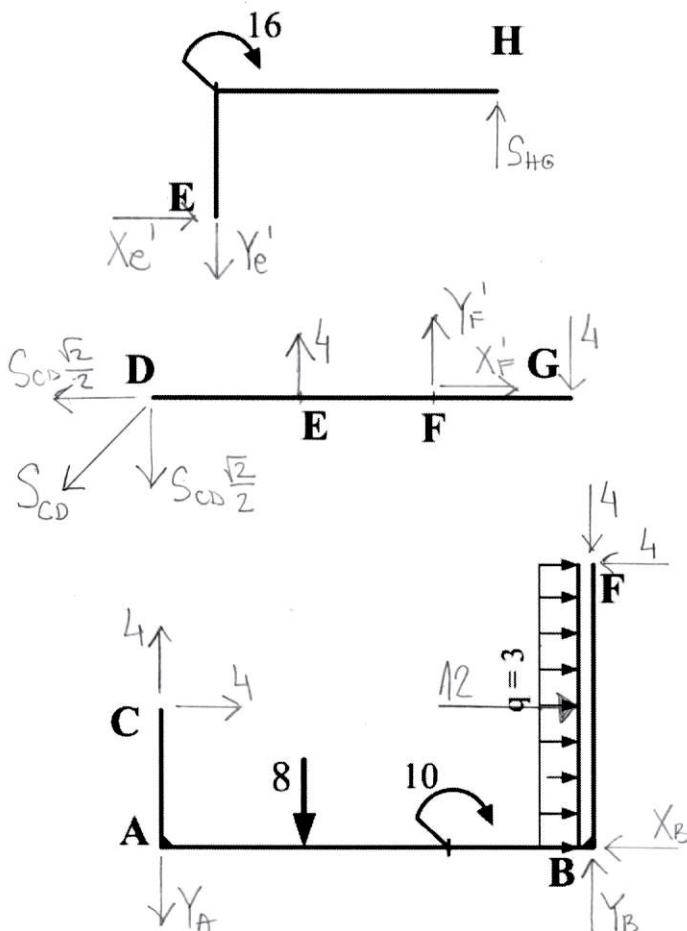
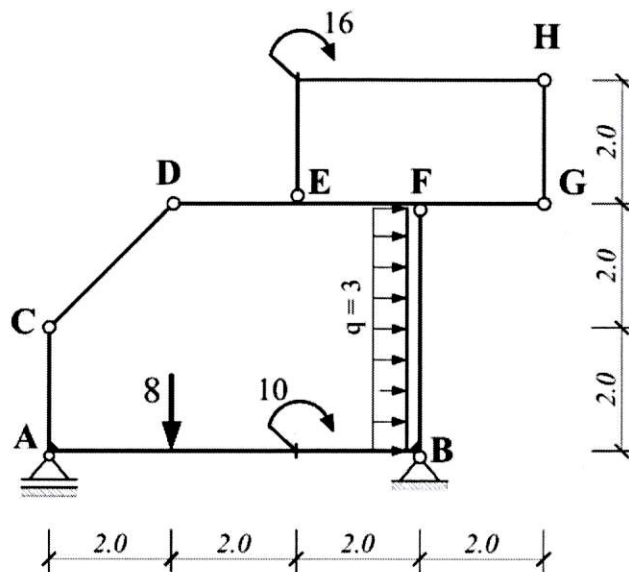


1.



$$\sum X = 0 \Rightarrow X_e' = 0$$

$$\sum M_E^+ = 0: S_{HG} \cdot 4 - 16 = 0 \Rightarrow S_{HG} = 4$$

$$\sum Y = 0 : Y_e = 4$$

$$\sum X = 0: X_F' - 5 \cos \frac{\sqrt{2}}{7} = 0 \Rightarrow X_F' = 4$$

$$\sum Y = 0: Y_F' - S_{CD} \frac{\sqrt{2}}{2} - 4 + 4 = 0 \Rightarrow Y_F' = 4$$

$$\sum M_F^+ = 0; S_{CD} \frac{\sqrt{2}}{2} \cdot 4 - 4 \cdot 2 - 4 \cdot 2 = 0 \Rightarrow S_{CD} = 5,66$$

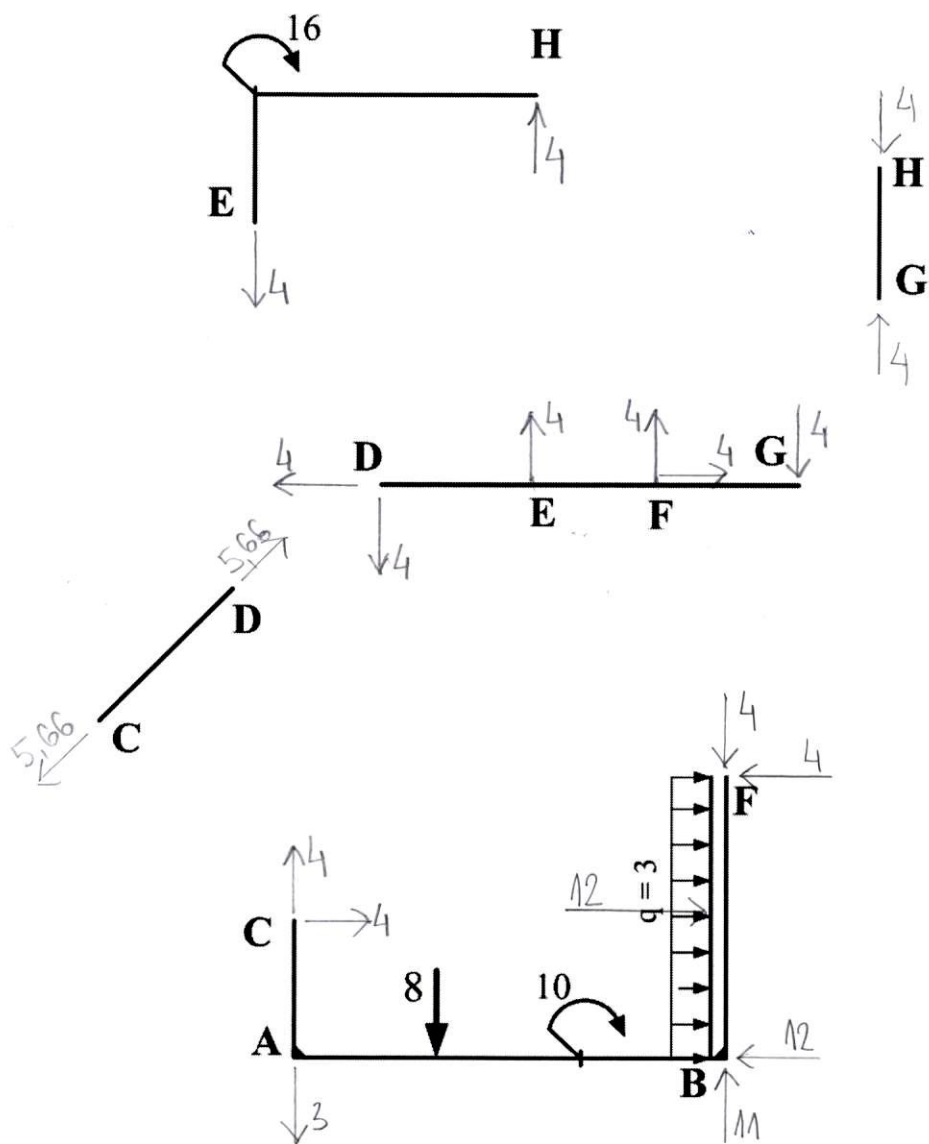
$$\sum X = 0: -X_B + 12 + 4 - 4 = 0 \Rightarrow X_B = 12$$

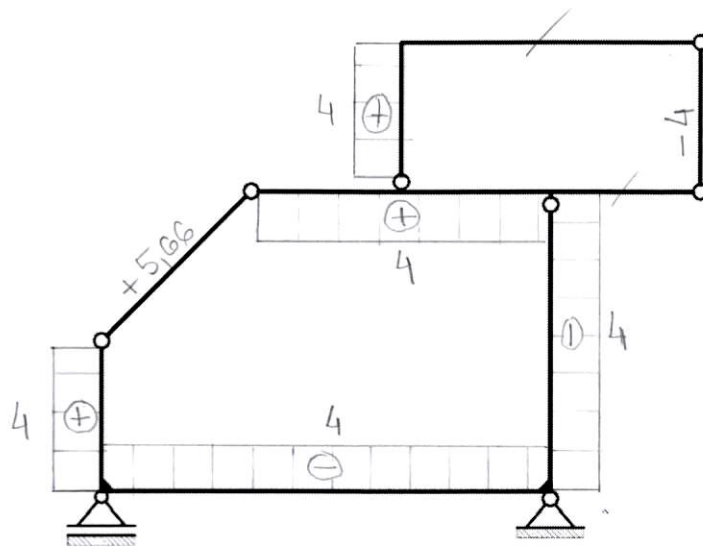
$$\sum Y = 0: Y_B - Y_A - 4 + 4 - 8 = 0 \Rightarrow Y_B = 11$$

$$\sum M_B^{\uparrow} = 0: Y_A \cdot 6 - 4 \cdot 6 - 4 \cdot 2 + 8 \cdot 4 - 10 - 12 \cdot 2 + 4 \cdot 4 = 0$$

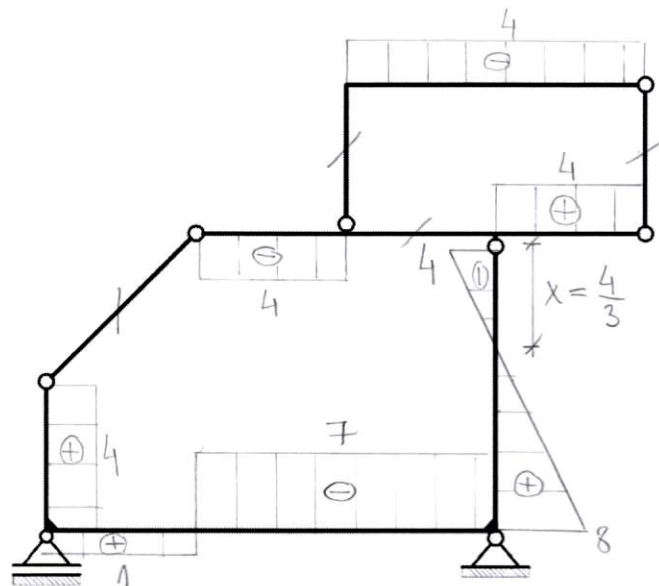
$$V_A = 3$$

РЕКАПИТУЛАЦИЈА

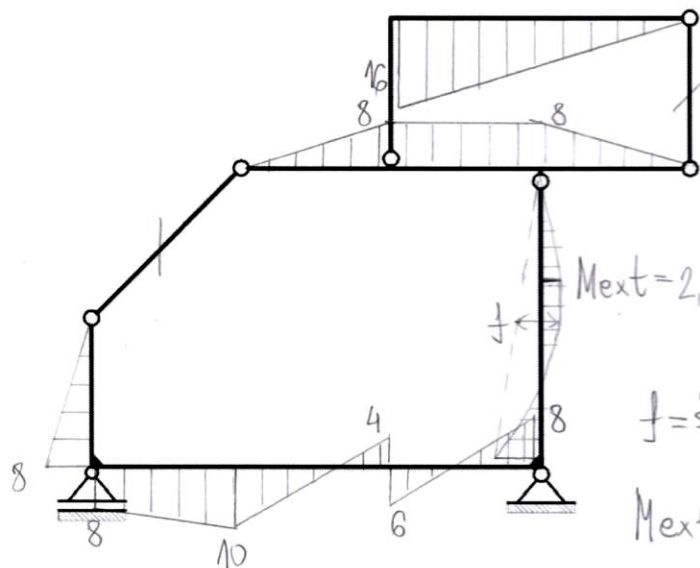




N



T



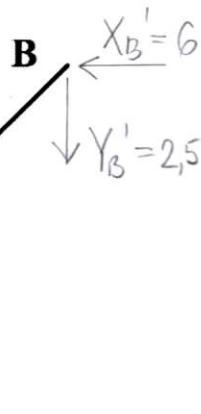
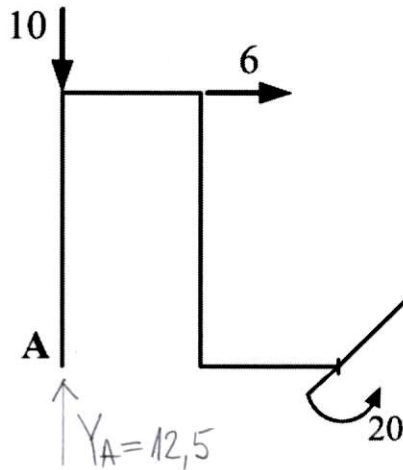
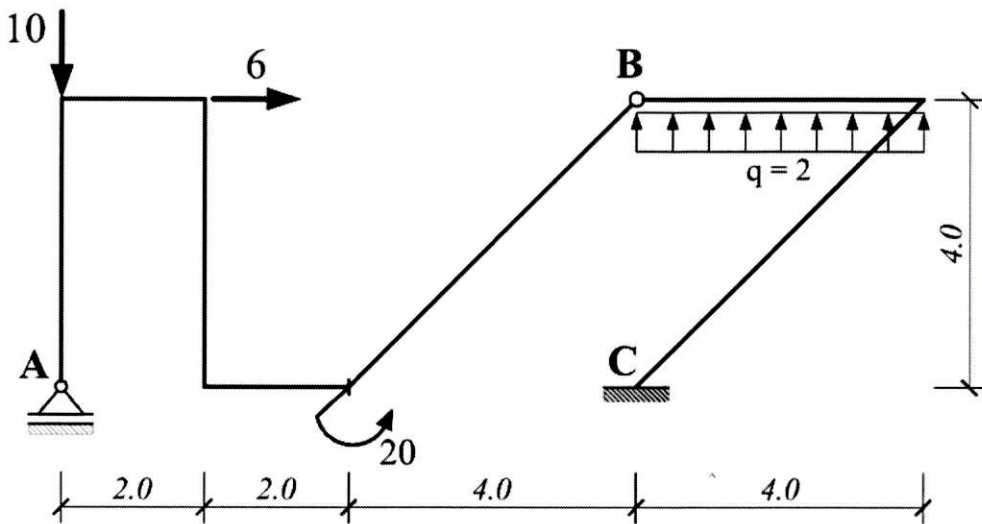
M

$$M_{ext} = 2,67$$

$$f = \frac{ql^2}{8} = \frac{3 \cdot 4^2}{8} = 6$$

$$M_{ext} = \frac{4}{3} \cdot 4 / 2 = \frac{8}{3} = 2,67$$

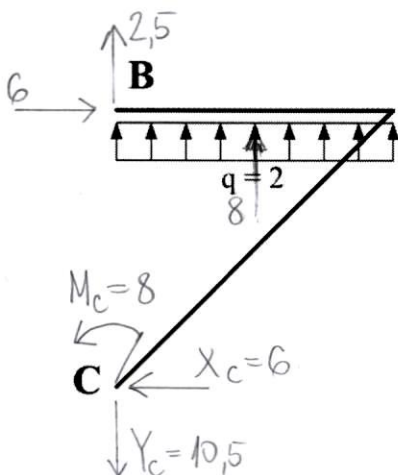
2.



$$\sum X = 0: X_B' = 6$$

$$\sum Y = 0: Y_A - Y_B' - 10 = 0 \Rightarrow Y_B' = 2,5$$

$$\sum M_B^+ = 0: Y_A \cdot 8 - 10 \cdot 8 - 20 = 0 \Rightarrow Y_A = 12,5$$

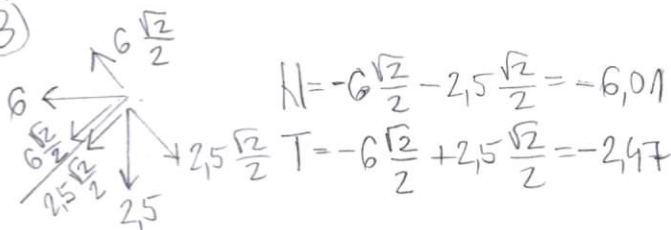


$$\sum X = 0: X_C = 6$$

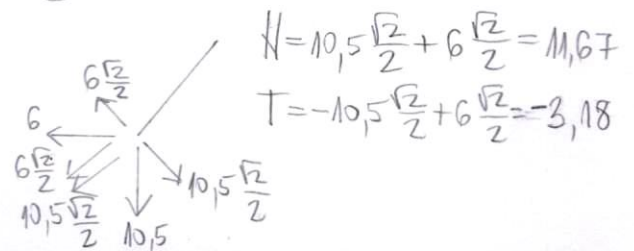
$$\sum Y = 0: -Y_C + 2,5 + 8 = 0 \Rightarrow Y_C = 10,5$$

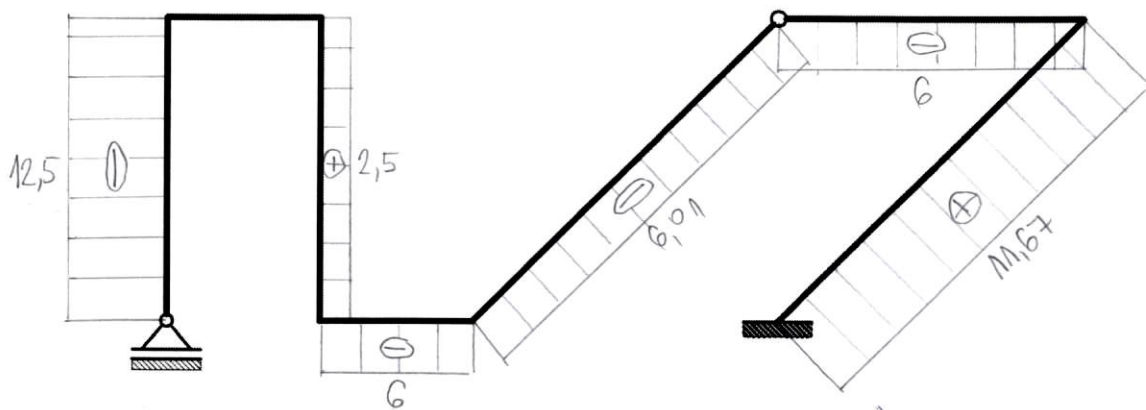
$$\sum M_C^+ = 0: M_C + 8 \cdot 2 - 6 \cdot 4 = 0 \Rightarrow M_C = 8$$

$\alpha = 45^\circ$ (B)

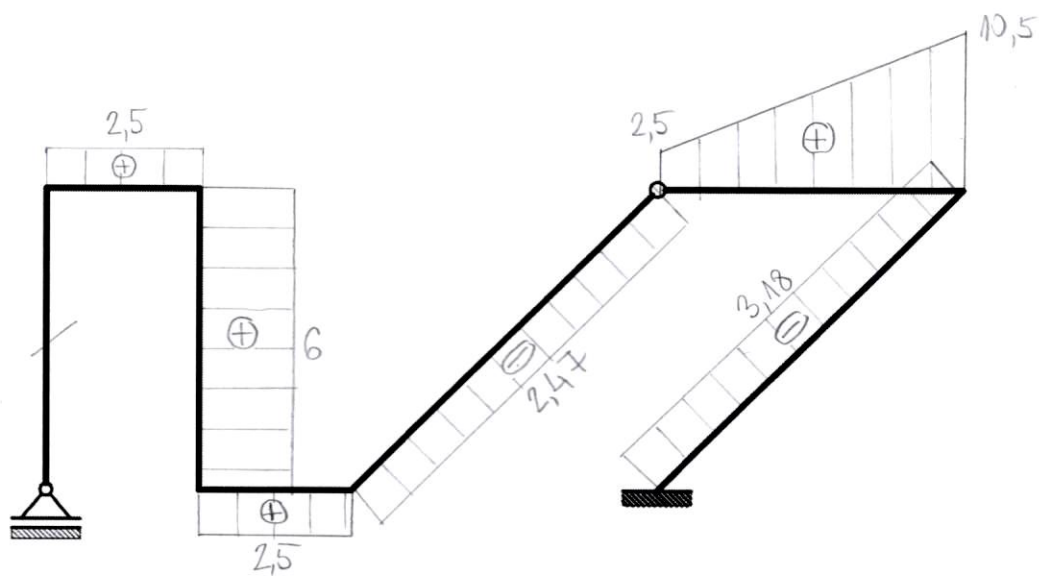


(C) $\alpha = 45^\circ$

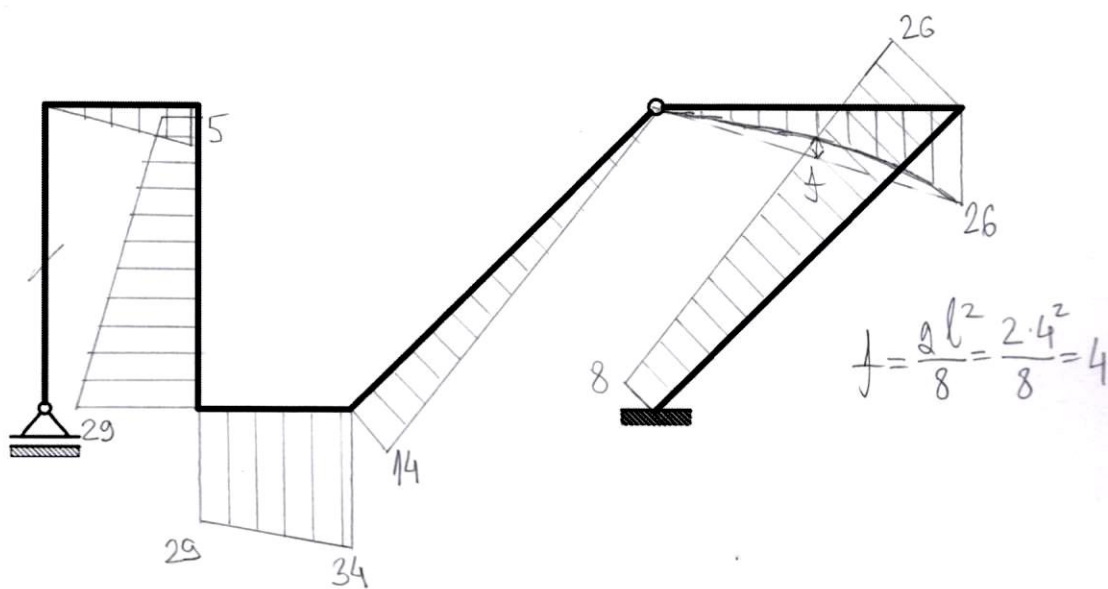




N

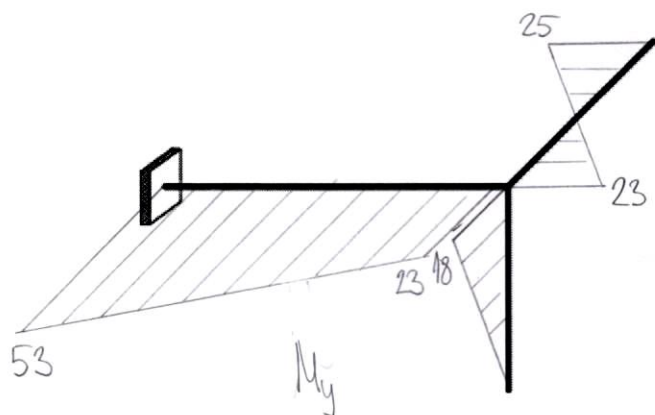
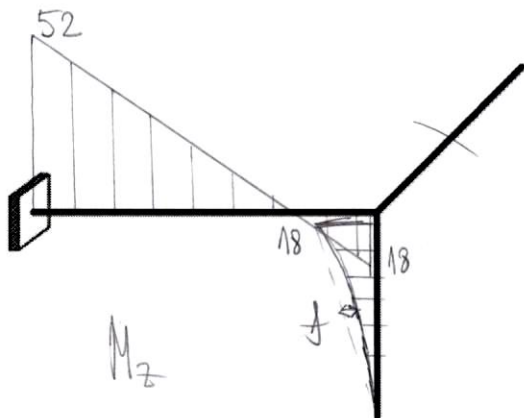
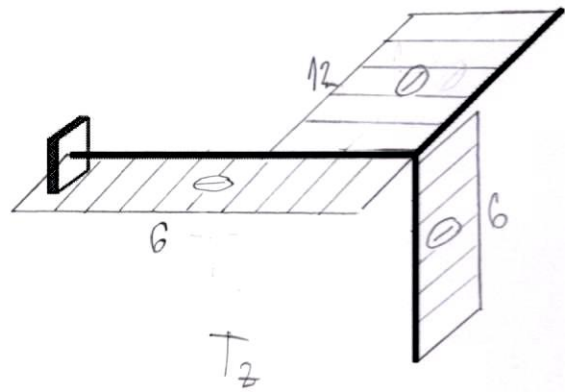
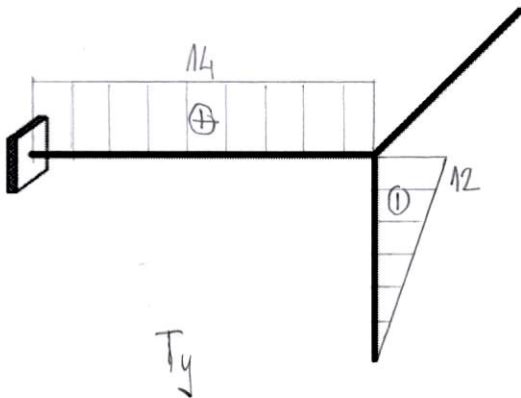
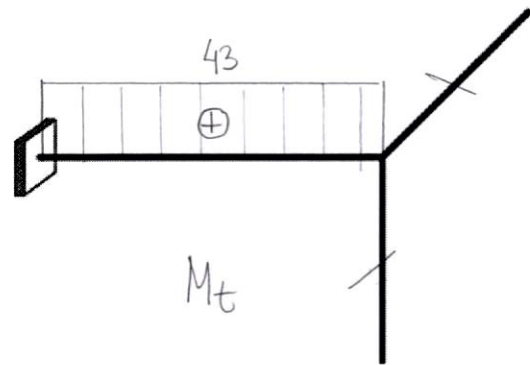
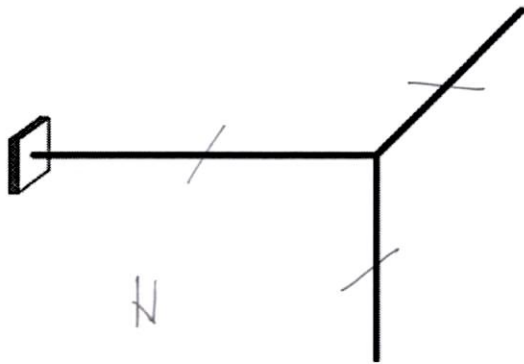
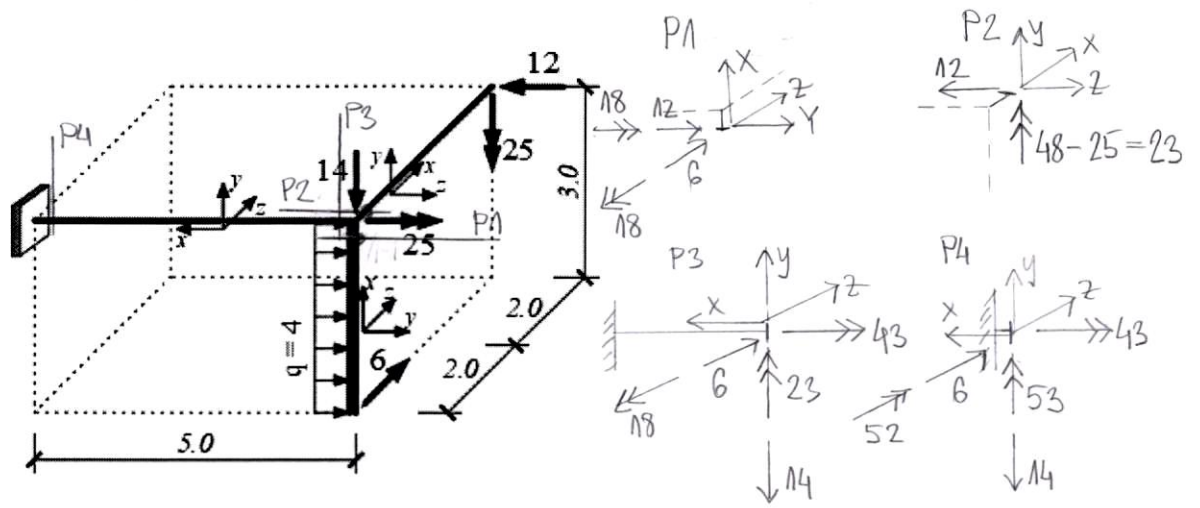


T



M

3.



$$f = \frac{4 \cdot 3^2}{8} = 4,5$$