1. Naloga:

$M_{\mathrm{MAX}} = 2{,}50328\ \mathrm{kNm}$

$x_{\mathrm{MAX}} = 0{,}3873\ \mathrm{m}$

2. Naloga:

$$(\sigma_{\mathrm{ij}}) = \begin{pmatrix} 50 & 50/\sqrt{3} & 0 \\ 50/\sqrt{3} & 50 & 0 \\ 0 & 0 & 0 \end{pmatrix} \mathrm{MPa}$$

3. Naloga:

$\sigma_1 = 56{,}0328\ \mathrm{MPa},\ \ \alpha_1 = 117{,}504°$

$\sigma_2 = -66{,}0328\ \mathrm{MPa},\ \ \alpha_2 = 27{,}504°$

4. Naloga:

$\Delta\overline{BD} = 0{,}0366\ \mathrm{mm}$ Razdalja se poveča/podaljša.

5. Naloga:

$$(\sigma_{\mathrm{ij}}) = \begin{pmatrix} -30 & 0 & 0 \\ 0 & -7 & 0 \\ 0 & 0 & 0 \end{pmatrix} \mathrm{MPa}$$

6. Naloga:

$20 > 19$ --- 1-krat statično nedoločen sistem, $N_1 = N_2 = 4\ \mathrm{kN}, A_y = 6\ \mathrm{kN}$ (reakcija v podpori)

7. Naloga:

$a \geq 33{,}97\ \mathrm{mm}$

8. Naloga:

$$y(x=0) = \frac{1}{EI_z}\left(\frac{M_0 L^2}{2} - \frac{FL^3}{3}\right) = -5{,}4\ \mathrm{mm}$$ (nosilec se premakne navzgor)

9. Naloga:

$\sigma_{xx,A} = -95{,}902\ \mathrm{MPa},\ \ \sigma_{xx,B} = 95{,}486\ \mathrm{MPa}$

10. Naloga:

$I_t = 23992{,}32\ \mathrm{mm}^4,\ \ W_{t,min} = 2999{,}04\ \mathrm{mm}^3,\ \ \tau_{MAX} = 143{,}379\ \mathrm{MPa}$

11. Naloga:

$a = 15{,}592\ \mathrm{mm}$ (v Euler – jevem področju)