

GEODETSKI RAČUNI – VAJE

VAJA 2 – RAVNINSKA TRIGONOMETRIJA – REŠITVE

Naloga 1

$$a = 144,16 \text{ m}$$

$$b = 95,92 \text{ m}$$

$$c = 173,16 \text{ m}$$

$$\alpha = 33^\circ 38' 21,7''$$

$$\beta = 56^\circ 21' 38,3''$$

$$\gamma = 90^\circ 00' 00,0''$$

Naloga 2

$$a = 15,095 \text{ m}$$

$$b = 19,372 \text{ m}$$

$$c = 25,451 \text{ m}$$

$$\alpha = 36^\circ 15' 22''$$

$$\beta = 49^\circ 22' 15''$$

$$\gamma = 94^\circ 22' 23''$$

Naloga 3

$$a = 19,651 \text{ m}$$

$$b = 19,994 \text{ m}$$

$$c = 22,832 \text{ m}$$

$$\bar{\alpha} = 54^\circ 8' 11''$$

$$\bar{\beta} = 55^\circ 32' 36''$$

$$\bar{\gamma} = 70^\circ 19' 13''$$

Naloga 4

$$a = 35,505 \text{ m}$$

$$b = 81,731 \text{ m}$$

$$c = 78,513 \text{ m}$$

$$\alpha = 25^\circ 30' 2''$$

$$\beta = 82^\circ 19' 18''$$

$$\gamma = 72^\circ 10' 40''$$

Naloga 5

$$a = 22,374 \text{ m}$$

$$b = 17,199 \text{ m}$$

$$c = 29,252 \text{ m}$$

$$\alpha = 49^\circ 41' 40''$$

$$\beta = 35^\circ 53' 21''$$

$$\gamma = 94^\circ 24' 59''$$

Naloga 6

trikotnik 1:

$$\begin{aligned}a &= 17,199 \text{ m} \\b &= 22,374 \text{ m} \\c_1 &= \mathbf{16,635 \text{ m}}\end{aligned}$$

$$\begin{aligned}\alpha &= 49^\circ 41' 40'' \\ \beta_1 &= \mathbf{82^\circ 46' 39''} \\ \gamma_1 &= \mathbf{47^\circ 31' 41''}\end{aligned}$$

trikotnik 2:

$$\begin{aligned}a &= 17,199 \text{ m} \\b &= 22,374 \text{ m} \\c_2 &= \mathbf{12,311 \text{ m}}\end{aligned}$$

$$\begin{aligned}\alpha &= 49^\circ 41' 40'' \\ \beta_2 &= \mathbf{97^\circ 13' 21''} \\ \gamma_2 &= \mathbf{33^\circ 4' 59''}\end{aligned}$$

Naloga 7

$$\begin{aligned}a &= 23,53 \text{ m} \\b &= 19,74 \text{ m} \\c &= 18,63 \text{ m}\end{aligned}$$

$$\begin{aligned}\alpha &= 75^\circ 35' 11'' \\ \beta &= 54^\circ 20' 35'' \\ \gamma &= 50^\circ 4' 14''\end{aligned}$$

$$\begin{aligned}S &= 178,1 \text{ m}^2 \\ v_a &= 7,57 \text{ m} \\ v_b &= 9,02 \text{ m} \\ v_c &= 9,56 \text{ m}\end{aligned}$$

Naloga 8

$$h = \mathbf{67,705 \text{ m}}$$

Naloga 9

$$h = \mathbf{22,067 \text{ m}}$$