

GEODETSKI RAČUNI – VAJE

VAJA 9 – SFERNA TRIGONOMETRIJA – NALOGE

Naloga 1

Reši sferne trikotnike, dane z:

| | | | |
|---|--------------------------------|--------------------------------|---------------------------------|
| A | $a = 125^{\circ} 13' 14''$ | $b = 53^{\circ} 58' 35''$ | $c = 96^{\circ} 7' 54''$ |
| B | $\alpha = 81^{\circ} 14' 11''$ | $\beta = 93^{\circ} 24' 41''$ | $\gamma = 104^{\circ} 58' 34''$ |
| C | $b = 120^{\circ} 31' 37''$ | $c = 76^{\circ} 43' 29''$ | $\alpha = 108^{\circ} 12' 50''$ |
| D | $b = 95^{\circ} 1' 22''$ | $\alpha = 87^{\circ} 13' 2''$ | $\gamma = 152^{\circ} 47' 48''$ |
| E | $b = 5^{\circ} 14' 3''$ | $c = 38^{\circ} 47' 12''$ | $\beta = 48^{\circ} 13' 59''$ |
| F | $b = 55^{\circ} 43' 15''$ | $c = 38^{\circ} 25' 12''$ | $\beta = 73^{\circ} 31' 29''$ |
| G | $a = 61^{\circ} 3' 37''$ | $c = 35^{\circ} 57' 22''$ | $\gamma = 28^{\circ} 22' 49''$ |
| H | $a = 59^{\circ} 33' 17''$ | $c = 165^{\circ} 17' 28''$ | $\gamma = 45^{\circ} 41' 1''$ |
| I | $c = 81^{\circ} 3' 8''$ | $\alpha = 73^{\circ} 20' 40''$ | $\gamma = 11^{\circ} 39' 13''$ |
| J | $b = 71^{\circ} 31' 23''$ | $\alpha = 170^{\circ} 0' 5''$ | $\beta = 57^{\circ} 13' 33''$ |
| K | $b = 22^{\circ} 53' 53''$ | $\alpha = 89^{\circ} 3' 44''$ | $\beta = 41^{\circ} 39' 15''$ |
| L | $c = 17^{\circ} 52' 1''$ | $\beta = 66^{\circ} 30' 14''$ | $\gamma = 138^{\circ} 19' 27''$ |

Naloga 2

Reši pravokotna sferna trikotnika, dana z:

| | | | |
|---|---------------------------|-------------------------------|------------------------------|
| A | $a = 45^{\circ} 45' 47''$ | $\alpha = 60^{\circ} 15' 2''$ | $\gamma = 90^{\circ} 0' 0''$ |
| B | $a = 61^{\circ} 17' 20''$ | $c = 33^{\circ} 22' 39''$ | $\beta = 90^{\circ} 0' 0''$ |

Naloga 3

Reši pravostranična sferna trikotnika, dana z:

| | | | |
|---|---------------------------|----------------------------|-------------------------------|
| A | $a = 41^{\circ} 43' 13''$ | $c = 90^{\circ} 0' 0''$ | $\beta = 70^{\circ} 31' 5''$ |
| B | $b = 90^{\circ} 0' 0''$ | $c = 123^{\circ} 36' 58''$ | $\alpha = 49^{\circ} 11' 8''$ |