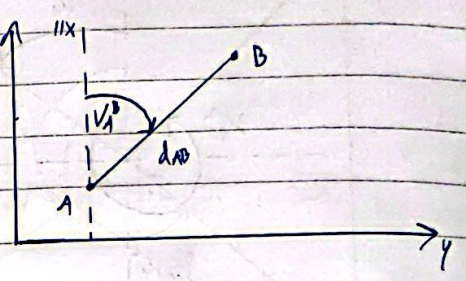
~~Timotej Gros~~

Timotej Gros Geodezija vaja 1

Primer 17




**1. Naloga**

$A(y,x) = (455236,007, 101327,558)$

$B(y,x) = (457041,376, 101928,793)$

$d_{AB} = \sqrt{\Delta y^2 + \Delta x^2} = \sqrt{(1805,369)^2 + (601,235)^2} = \sqrt{3620840,751} =$

$d_{AB} = 1902,851\ m$

$V_A^B = \arctan \frac{\Delta y}{\Delta x} = \operatorname{arctan} \frac{1805,369}{601,235} = \arctan 3,003 = 71,582°$

$V_A^B = 71,582° = 71°34'55,2''$

$V_B^A = V_A^B + 180° = 71,582° + 180° = 251,582° = 251°34'55,2''$

**2. Naloga**

$C(y,x) = (455236,007, 101327,558)$

~~$D(y,x) = (455041.376, 101128.793)$~~

$D(y,x) = (455041.376, 101128.793)$

$d_{CD} = \sqrt{\Delta y^2 + \Delta x^2} = \sqrt{(-194,631)^2 + (-198.765)^2} = \sqrt{77388.751} =$

$d_{CD} = 278,188\ m$

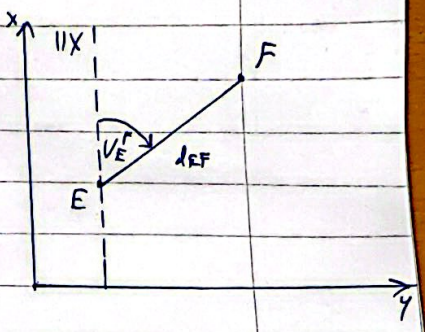
$V_C^D = \operatorname{arctan} \frac{\Delta y}{\Delta x} + 180° = \operatorname{arctan} \frac{194.631}{198.765} + 180° = \operatorname{arctan} 0.979 + 180° =$

$V_C^D = 224.392° = 224°23'31,2''$

$V_D^C = V_C^D - 180° = 224,392° - 180° = 44,392°$

$V_D^C = 44.392° = 44°23'31,2''$

3. Naloga | $E(y,x) = (455236.007, 101327.558)$




$V_E^F = 52° 7' 30,1''$

$d_{EF} = 1140.18\,m$

$F = ?$

$\Delta y = \sin V_E^F \cdot d_{EF}$

$y_2 - y_1 = \sin V_E^F \cdot d_{EF}$

$y_2 = y_1 + \sin V_E^F \cdot d_{EF}$

$y_2 = 455236,007_m + \sin 52° 7' 30,1'' \cdot 1140.18\,m$

$y_2 = 455236.007 + 900,0034 = 456136.011\,m$

$\Delta x = \cos V_E^F \cdot d_{EF}$

$x_2 = x_1 + \cos V_E^F \cdot d_{EF}$

$x_2 = 101327.558_m + \cos 52.125 \cdot 1140.18\,m$

$x_2 = 101327.558_m + 715.604\,m = 102043.162_m$

$F(y,x) = (456136.011_m, 102043.162_m)$

4. Naloga | $G(y,x) = (455236,007,\ 101327.558)$

$V_6^H = 302° 28' 16,3''$ , $d_{GH} = 1303,84\,m$

$V_6^H = 302.471°$

$y_2 = y_1 + \sin V_6^H \cdot d_{GH}$

$y_2 = 455236.007 + \sin 302,471° \cdot 1303,84\,m$

$y_2 = 454136.005\,m$

$x_2 = x_1 + \cos V_6^H \cdot d_{GH}$

$x_2 = 101327.558 + \cos 302.471° \cdot 1303,84\,m$

$x_2 = 102027.554\,m$

$H(y,x) = (454136.005_m, 102027.554_m)$