

**BARAZIMI I KOORDINATAVE TE PIKES 5 NE
BAZE TE GJATESIVE**



Arhitekti daravimi i koordinatare te pikels Δ 5 me base te ketyre shelmimeve: ①

Koordinatat njese:

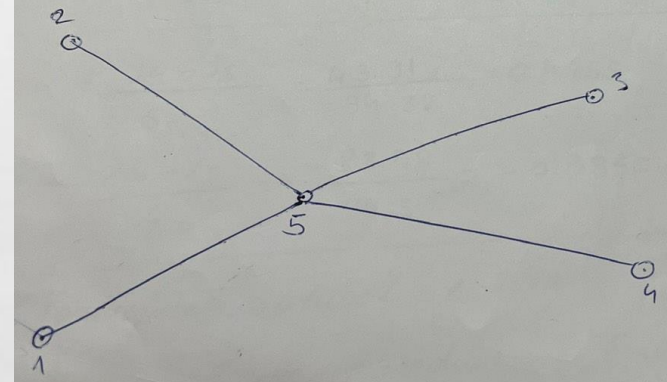
Nr.	y	x
Δ 1	9.84	39.35
Δ 2	14.76	172.18
Δ 3	167.26	186.94
Δ 4	127.91	29.52

Koordinatat e petyflesishme:

Nr.	y	x
Δ 5	84.00	113.00

Gjatesite:

$d_{5,1} = 104.25m$
$d_{5,2} = 90.67m$
$d_{5,3} = 111.59m$
$d_{5,4} = 94.57m$



$$S_{5,1} = \frac{y_1 - y_5}{S_{5,1}} = \frac{-74.16}{104.52} = -0.7095$$

$$X_{5,1} = \frac{x_1 - x_5}{S_{5,1}} = \frac{-73.65}{104.52} = -0.7047$$

$$y_{5,2} = \frac{y_2 - y_5}{S_{5,2}} = \frac{-69.24}{91.08} = -0.7602$$

$$X_{5,2} = \frac{x_2 - x_5}{S_{5,2}} = \frac{59.18}{91.08} = 0.6497$$

$$y_{5,3} = \frac{y_3 - y_5}{S_{5,3}} = \frac{83.26}{111.35} = 0.7477$$

$$X_{5,3} = \frac{x_3 - x_5}{S_{5,3}} = \frac{73.94}{111.35} = 0.6640$$

$$y_{5,4} = \frac{y_4 - y_5}{S_{5,4}} = \frac{43.91}{94.32} = 0.4655$$

$$X_{5,4} = \frac{x_4 - x_5}{S_{5,4}} = \frac{-23.48}{94.32} = -0.8850$$

Formojmë autoret e lirë:

$\pi_i =$ "E peshifikësishme" - "E matur"

$$T_1 = 104.52 - 104.25 = 0.27$$

$$T_2 = 91.08 - 90.67 = 0.41$$

$$T_3 = 111.35 - 111.59 = -0.24$$

$$T_4 = 94.32 - 94.57 = -0.25$$

Ekuaionet lineare janë:

(3)

$$\begin{aligned}
 V_1 &= -0.7095 \cdot \Delta X_5 - 0.7047 \cdot \Delta Y_5 + 0.27 \\
 V_2 &= -0.7602 \cdot \Delta X_5 + 0.6497 \cdot \Delta Y_5 + 0.41 \\
 V_3 &= 0.7477 \cdot \Delta X_5 + 0.6640 \cdot \Delta Y_5 - 0.24 \\
 V_4 &= 0.4655 \cdot \Delta X_5 - 0.8850 \cdot \Delta Y_5 - 0.25
 \end{aligned}$$

Ekuaionet normale janë:

	a]	b]	f]
[a]	1.8570	0.0906	-0.4159
[b]	2.1428	0.1380	
[f]		0.3611	

Fqjidhja e ekuacioneve normale (shema Gauss)

	a]	b]	f]	s]
[a]	1.8570	0.0906	-0.4159	1.5317
	-1.00	-0.0488	0.2240	-0.8248
[b]	2.1428	0.1380		2.3714
	-0.0044	0.0203		-0.0747
	2.1384	0.1583		2.2967
	-1.00	-0.0740		-1.0740
[f]		0.3611		0.0832
		-0.0931		0.3430
		0.268		0.4262
		-0.0117		-0.1700
(pN)		0.2563		0.2563

$$\begin{aligned}
 \Delta X_5 &= 0.2276 \\
 \Delta Y_5 &= -0.0740
 \end{aligned}$$

Ukupni i naklonsi:

(4)

a]	b]	Q ₁₁	Q ₂₂
1.8570	0.0906	0.53850296	0
1.00	0.0488	0.53850296	0
[b	2.1428	0	1
	0.0044	0.04878837	0
	2.1384	-0.04878837	1
	1.00	-0.02281536	0.467639356

$$Q_{11} = 0.53964635$$

$$Q_{12} = -0.02281536$$

$$Q_{22} = 0.467639356$$

Koordinate e baraturara:

$$y'_5 = y_5 + \Delta y_5 = 84.00 + (-0.0740) = ~~83.93~~ 83.93 \text{ m}$$

$$x'_5 = x_5 + \Delta x_5 = 113.00 + 0.2276 = ~~113.23~~ 113.23 \text{ m}$$

Jubimi i meselm njehsi dshite:

$$m_0 = \sqrt{\frac{[p v_0]}{n-1}} = \sqrt{\frac{0.2563}{4-2}} = 0.36''$$

$$m_0 = 0.36''$$

$$m_{x_5} = m_0 \cdot \sqrt{Q_{11}} = 0.2644 \text{ m}$$

$$m_{y_5} = m_0 \cdot \sqrt{Q_{22}} = 0.2462 \text{ m}$$

ESE-BAZRAZIMI TERTHOR I MATJEVE KUSHTORE