

## Toronymérés központosítása

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Ap	Irány	irányérték	távolság					
D	1	2.372483	11299	$\alpha_A =$	111.5429	$\beta_K =$	15.4456	a = 73.780
	2	16.023652	16411	$\beta_A =$	14.1055	$\gamma_K =$	61.1344	
	3	50.333787	19006	$\gamma_A =$	53.5427	$\phi =$	32.4913	1 irány
	4	81.135348	10102					
Ny	4	9.260735		$\alpha_A =$	106.3511	$\beta_K =$	53.4005	a = 42.879
	5	10.273521	14789	$\beta_A =$	49.0732	$\gamma_K =$	28.1812	
	6	47.273202	15794	$\gamma_A =$	24.1719	$\phi =$	96.3251	7 irány
	7	94.333050	8928					
É	7	16.031846		$\alpha_A =$	97.2136	$\beta_K =$	56.5801	a = 69.104
	8	54.590332	12168	$\beta_A =$	54.5442	$\gamma_K =$	30.2133	
	9	72.152913	19672	$\gamma_A =$	27.4339	$\phi =$	-4.0216	7 irány
	10	94.050702	12341					
K	10	8.421917		$\alpha_A =$	69.1022	$\beta_K =$	62.5026	a = 68.279
	11	48.510971	12305	$\beta_A =$	61.5020	$\gamma_K =$	50.5255	
	12	84.012092	19764	$\gamma_A =$	48.5912	$\phi =$	98.3322	1 irány
	1	127.012397						

### $\Delta$ szögeinek kiegyenlítése

	D	Ny	E	K
$\Delta ["] =$	9.00	-2.00	3.00	6.00
$\alpha_A =$	111.5432	106.3510	97.2137	69.1024
$\beta_A =$	14.1058	49.0731	54.5443	61.5022
$\gamma_A =$	53.5430	24.1718	27.4340	48.5914

### Toronyablakok ill. a központ koordinátáinak számítása

	D	Ny	É	K
$y_A =$	15.745	13.915	26.528	48.598
$x_A =$	11.478	30.836	50.468	42.264
$x_A' =$	62.302	12.043	18.636	26.015
a szám =	a	a	a	a
$y_K =$	18.017	16.540	29.313	51.483
$x_K =$	9.893	30.715	50.044	41.866
$x_K' =$	63.887	12.164	19.060	26.413
a =	a	a	a	a

### Külpontossági elemek számítása

	D	Ny	É	K
$\upsilon =$	124.5411	92.3838	98.3942	97.5111
$\varepsilon =$	171.5422	238.1901	149.3209	258.1455
$r =$	2.770	2.628	2.817	2.913

### Központosítás

Ap	irány	irányérték	távolság	külp.elemek	$\varepsilon$	$\eta$ [ " ]	közp.ir.ért.
D	1	2.372483	11299	$r =$ 2.770	171.5422	7.1	2.373195
	2	16.023652	16411	$\varepsilon =$ 171.5422	185.1933	-3.2	16.023329
	3	50.333787	19006	$l_{\text{közp}} =$ 190.4303	219.5035	-19.3	50.331861
	4	81.135348	10102		250.3050	-53.3	81.130016
Ny	4	9.260735	10102	$r =$ 2.628	153.1138	24.2	9.263155
	5	10.273521	14789	$\varepsilon =$ 238.1901	154.1305	15.9	10.275115
	6	47.273202	15794	$l_{\text{közp}} =$ 216.143	191.1302	-6.7	47.272534
	7	94.333050	8928		238.1901	-51.7	94.323884

É	7	16.031846	8928	r =	2.817	149.3209	33.0	16.035146
	8	54.590332	12168	ε =	149.3209	188.2754	-7.0	54.585629
	9	72.152913	19672	l <sub>közp</sub> =	226.3109	205.4420	-12.8	72.151630
	10	94.050702	12341			227.3358	-34.8	94.043227
K	10	8.421917	12341	r =	2.913	139.5550	31.3	8.425051
	11	48.510971	12305	ε =	258.1455	180.0441	-0.1	48.510964
	12	84.012092	19764	l <sub>közp</sub> =	228.4629	215.1452	-17.5	84.010338
	1	127.012397	11299			258.1455	-52.1	127.003191

### Horizontzárás

Áp	irány	l <sup>0</sup>	változás [ " ]	javított iránysorozat	egyesített iránysorozat
D	1	0.000000	0.00	0.000000	0.000000
	2	13.250134	0.29	13.250163	13.250163
	3	47.554666	0.29	47.554695	47.554695
	4	78.352821	0.57	78.352878	78.352878
Ny	4	0.000000	0.00	0.000000	0.000000
	5	1.011960	0.29	1.011989	79.364867
	6	38.005380	0.29	38.005408	116.362287
	7	85.060729	0.57	85.060786	163.413665
É	7	0.000000	0.00	0.000000	0.000000
	8	38.550483	0.29	38.550512	202.364177
	9	56.112484	0.29	56.112513	219.530178
	10	78.004081	0.57	78.004138	241.421803
K	10	0.000000	0.00	0.000000	0.000000
	11	40.081913	0.29	40.081942	281.503745
	12	75.181286	0.29	75.181315	317.003118
	1	118.174140	0.57	118.174197	360.000000
Szektorok száma		4			
Szektorok összege		359.595771		360.000000	
Horizontzárási hiba [ " ]		2.29			
Δ <sub>max</sub> [ " ]		7.00			
		jó			