

氏家都市計画土地区画整理事業

確定測量

換地面積計算書

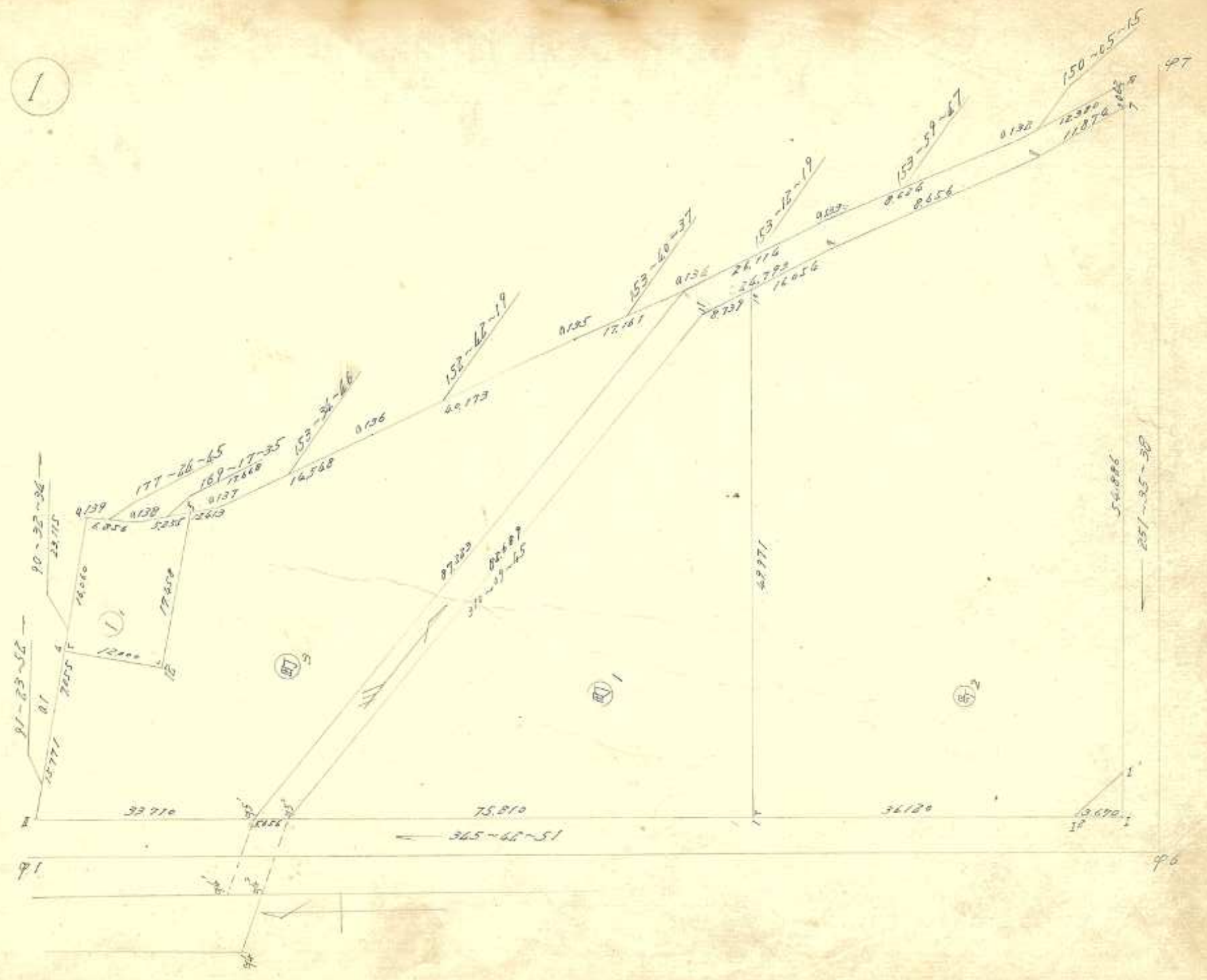
草川工区

昭和39年12月実測

全4冊内1(1~20)

宇都宮市清柱町2-781
協和建設測量有限会社
電話(2)5777

1



各筆面積計算集計表

ブロック番号	各筆確定			備考	各筆番号	各筆確定			備考
	各筆番号	面積 m ²	積坪			各筆番号	面積 m ²	積坪	
1	④	2035.425	615.73						
	④	2036.611	616.07						
	④	2074.267	627.46						
	①	198.551	60.06						
	④	418.056	126.46	10→7*0.7					
					計				
						m ²		坪	
					ブロック計算=	6346.280		ブロック計算=	1919.33
					各筆集計=	6346.904(-		各筆集計=	1919.38(-
					ε =	0.26		ε =	0.01

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ④	10	6,582.627	-	+ 20.131	3,828.663	-	+ 46.487	1,651.477		1,583.565	
	7	6,570.296	-	⊖ 61.131	3,780.237	-	+ 67.131	1,368.491			1,848.418
	95	6,643.758	-	⊙ 20.131	3,761.538	-	⊖ 46.487		4,171.018		232.151
	11	6,590.427	-	+ 61.131	3,824.724	-	⊖ 67.131		2,713.905	4,567.953	

控除シタル値

X = 於テ 6,550

y = 於テ 3,750

$\Sigma = \underline{2,813.968} \quad \underline{6,884.917} \quad \underline{6,151.518} \quad \underline{2,080.569}$

$2S = \underline{4,070.949}$

$S = \underline{4,070.949}$

$S = \underline{2,035.475}$

615.737 年 月 日

印

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ○			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				

控除シタル値

X = 於テ

y = 於テ

$\Sigma =$

$2S =$

$S =$

年 月 日

印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ④	7	6550.225	-	+ 27.622	3865.617	-	+ 46.759	2318.336	,	2661.133	,
	46 ^I	6532.895	-	+ 14.932	3793.537	-	+ 56.467	1857.482	,	650.094	,
	46 ^{II}	6535.293	-	0 37.401	3789.150	-	+ 13.200	469.397	,	,	1664.249
	1	6570.296	-	0 47.334	3780.237	-	0 39.513	,	2777.696	,	1621.238
	10	6582.627	-	+ 1.999	3828.663	-	0 55.663	,	4599.267	157.247	,
	9	6568.227	-	+ 22.119	3825.900	-	0 11.033	,	753.521	1899.449	,
	8	6560.517	-	+ 18.072	3839.696	-	0 9.717	,	588.044	1620.986	,
			-	-	,	-	-	,	,	,	,
			-	-	-	-	-	,	,	,	,

控除シタル値

X=於テ 6500

y=於テ 3750

$\Sigma =$ 4445.715 8718.408 6968.709 2895.487

$2S =$ 8072.228 4072.222

$S =$ 2036.511

616.07²⁹ 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ○			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,
			-	,	,	-	,	,	,	,	,

控除シタル値

X=於テ

y=於テ

$M =$

$2S =$

$S =$

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑦	0134	6592.984	-	⊖40.873	3826.794	-	+59.048	176.199			2138.801
	95'	6649.239	-	⊖88.923	3760.136	-	+74.976	4461.503			701.324
	491 ^{II}	6681.907	-	⊖32.283	3751.818	-	⊖7.448	684.523			58.690
	01	6681.522	-	+ .452	3767.584	-	⊖22.821	2088.626	7.948		
	4	6681.455	-	+12.066	3774.639	-	⊖6.942	636.881	297.294		
	12	6689.456	-	+12.164	3774.526	-	⊖17.944	1378.085	298.334		
	5	6689.291	-	+12.362	3791.983	-	⊖19.763	1567.028	518.994		
	0137	6657.096	-	+25.225	3794.289	-	⊖8.779	589.018	1117.190		
	0136	6644.066	-	+48.728	3800.762	-	⊖24.895	1345.973	7473.531		

控除シクル値

X = 於テ

y = 於テ

$\Sigma =$

$2S =$

S =

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	0135	6608.366	-	+51.082	3819.184	-	⊖26.032	478.104	3594.057		
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シクル値

X = 於テ 6.590

y = 於テ 3.750

$\Sigma =$

$2S =$

S =

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
①	5	6669.291	-	+ 4.998	3791.983	-	+ 16.481	317.935			209.891	
	12	6669.456	-	0 12.164	3774.526	-	+ 17.344	337.443				298.334
	4	6681.455	-	0 11.847	3774.639	-	0 16.172		508.690			291.898
	0.139	6681.303	-	+ 7.001	3790.698	-	0 16.968		512.368		284.927	
	0.138	6674.454	-	+ 12.012	3791.007	-	0 1.285		31.423		492.576	
			-	-			-					

控除シタル値

X = 於テ 6650

y = 於テ 3750

$$M = \frac{655.380}{2S} = \frac{1052.481}{397.101} = \frac{987.336}{397.102} = \frac{590.232}{198.551}$$

60.069 年 月 日 印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						
			-			-						

控除シタル値

X = 於テ

y = 於テ

$$M = \frac{\quad}{2S} = \frac{\quad}{S} = \frac{\quad}{\quad}$$

年 月 日 印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ①	7	6550.225	-	9.325	3845.617	-	+ 8.825	1,986			891,629
	8	6560.517	-	18.072	3839.696	-	+ 9.777	102,194			1620,986
	9	6568.297	-	29.910	3835.900	-	+ 14.972	273,943			2569,269
	11	6590.427	-	75.461	3824.724	-	+ 74.368	3006,475			5,138,748
	45 ²	6643.758	-	58.818	3761.532	-	+ 64.588	6055,642			678,220
	45 ¹	6649.239	-	50.774	3760.134	-	+ 65.262		6476,536	516,645	
	0134	6592.984	-	79.565	3826.794	-	+ 78.430		3371,235	6110,115	
	0133	6569.674	-	31.061	3838.566	-	+ 15.553		305,990	2750,949	
	0132	6561.923	-	18.482	3842.347	-	+ 9.955		118,693	1706,757	

控除シクル値

X = 於テ

y = 於テ

$\bar{x} =$

2S =

S =

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	97 ¹	6551.192	-	+ 11.698	3848.521	-	+ 3.270			3,898	1152,499
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シクル値

X = 於テ 6550

y = 於テ 3750

$\bar{x} =$

2S =

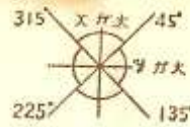
S =

418.056
126.46

年 月 日

多角点計算用紙

測量No. _____

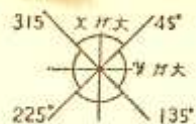


象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	96 ¹	"		"	.			.	.	.	.	6531.736	3790.056	96 ¹
96 ¹	96 ²			345 42 51	3.670			.	.	.	.	6535.293	3789.150	96 ²
96 ²	1			"	36.120			.	.	.	.	6570.296	3780.237	1
1	95 ²	151.276		"	75.810			.	.	.	.	6643.758	3761.532	95 ²
95 ²	95 ¹			"	5.656			.	.	.	.	6649.239	3760.136	95 ¹
95 ¹	91 ²			"	33.710			.	.	.	.	6681.907	3751.818	91 ²
91 ²	a1			91 23 52	15.771			.	.	.	.	6681.522	3767.584	a1
a1	4	23.115		90 32 34	7.055			.	.	.	.	6681.455	3774.639	4
4	a139			"	16.060			.	.	.	.	6681.303	3790.698	a139
a139	a138			177 46 45	6.856			.	.	.	.	6674.454	3791.007	a138
a138	5	17.668		169 17 35	5.255			.	.	.	.	6669.291	3791.983	5
5	a137			"	12.413			.	.	.	.	6657.094	3794.289	a137
a137	a136			153 34 46	14.548			.	.	.	.	6646.066	3800.762	a136
a136	a135			152 42 19	40.173			.	.	.	.	6608.366	3819.184	a135
a135	a134			153 40 37	17.161			.	.	.	.	6592.984	3826.794	a134
a134	a133			153 12 19	26.114			.	.	.	.	6589.674	3828.566	a133
a133	a132			153 59 47	8.624			.	.	.	.	6561.923	3842.347	a132
a132	97 ²			150 05 15	12.380			.	.	.	.	6551.192	3848.521	97 ²
97 ²	7	57.948		251 35 38	3.062			.	.	.	.	6550.225	3845.617	7
7	96 ¹			"	56.886			.	.	.	.	6532.895	3793.537	96 ¹
96 ¹	96 ²			"	3.670			.	.	.	.	6531.736	3790.056	96 ²

多角点計算用紙

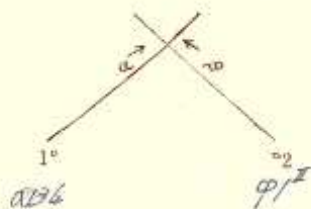
測量No.



象 限	I	+	-	+	-
	II	-	-	+	-
	III	-	+	-	-
	IV	+	+	-	-

測点	視点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
		° ' "		° ' "	.			.	.	.	.	6595.250	3819.010	96
				
					.			.	.	.	.	6569.676	3838.566	a133
a133	a133'			333 12 19	10.000	450791	892630	8.926	.	4.508	6570.600	3834.058	a133'	
a133'	a133''			243 12 19	3.000	"	"	.	1.352	2.678	6577.268	3831.380	a133''	
				
					.			.	.	.	.	6561.923	3842.347	a132
a132	a132'			333 59 47	5.000	458415	898773	4.694	.	2.192	6566.417	3840.155	a132'	
a132'	a132''			243 59 47	3.000	"	"	.	1.315	2.496	6565.102	3837.459	a132''	
				
					.			.	.	.	.	6539.650	3855.161	a131
a131	a131'			330 05 15	5.000	498656	866800	4.334	.	2.493	6543.984	3852.668	a131'	
a131'	a131''			240 05 15	3.000	"	"	.	1.496	2.600	6542.488	3850.068	a131''	
				
					.			.	.	.	.	6531.736	3790.056	96 ^I
96 ^I	1			345 42 51	39.990	246764	969076	38.560	.	9.812	6570.296	3780.237	1	
				
					.			.	.	.	.	6681.303	3790.698	a139
a139	4			270 32 34	16.060	009454	999955	.152	.	16.059	6681.455	3776.639	4	
4	12			180 32 34	12.000	"	"	.	11.999	.113	6669.456	3774.526	12	
				

算出點 95'



$$\begin{aligned} \frac{41}{2136} X_2 &= - 6161511.01907 \\ \frac{41}{2136} X_1 &= - 6161519.01984 \\ \Delta X &= - 118181.91213 \end{aligned}$$

$$\alpha = 1910^\circ - 09' - 45''$$

$$\beta = 145^\circ - 42' - 15''$$

$$\beta - \alpha = 135^\circ - 53' - 06''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11711.0171517 \\ \Delta X \times \textcircled{4} &= + 11211.0174515 \\ E &= 11510.0171617 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11711.0171517$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 11711.0171517 \\ X_1 &= - 6161519.01984 \\ X &= - 6161519.01984 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \\ Y_1 &= - 3171511.01818 \\ Y &= - 3171511.01818 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 3171511.01818 \\ Y_1 &= - 3181216.01794 \\ \Delta Y &= - 117161.976 \end{aligned}$$

$$\text{Cos} \alpha = + 0.18616191518 \textcircled{1}$$

$$\text{Sin} \alpha = 0.17616191518 \textcircled{2}$$

$$\text{Cos} \beta = 0.191619101717 \textcircled{3}$$

$$\text{Sin} \beta = + 0.12616171519 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - 0.15117141717 \textcircled{5}$$

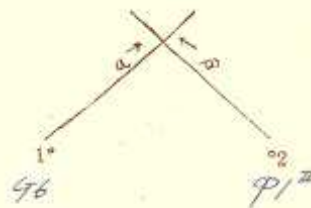
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0.14810171517 \\ \Delta X \times \textcircled{2} &= 0.16710171516 \\ F &= 11111.0171517 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11311.0171517$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0.11311.0171517 \\ X_2 &= - 6161511.01907 \\ X &= - 6161511.01907 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 11111.0171517 \\ Y_2 &= - 3171511.01818 \\ Y &= - 3171511.01818 \end{aligned}$$

算出點 95'



$$\begin{aligned} \frac{41}{96} X_2 &= - 6161511.01907 \\ \frac{41}{96} X_1 &= - 6161519.01984 \\ \Delta X &= - 11861.01817 \end{aligned}$$

$$\alpha = 1910^\circ - 09' - 45''$$

$$\beta = 145^\circ - 42' - 15''$$

$$\beta - \alpha = 135^\circ - 53' - 06''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11611.0171517 \\ \Delta X \times \textcircled{4} &= + 11211.0174515 \\ E &= 11510.0171617 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11711.0171517$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 11711.0171517 \\ X_1 &= - 6161519.01984 \\ X &= - 6161519.01984 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \\ Y_1 &= - 3171511.01818 \\ Y &= - 3171511.01818 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 3171511.01818 \\ Y_1 &= - 3181216.01794 \\ \Delta Y &= - 11617.01976 \end{aligned}$$

$$\text{Cos} \alpha = - 0.18616191518 \textcircled{1}$$

$$\text{Sin} \alpha = - 0.17616191518 \textcircled{2}$$

$$\text{Cos} \beta = - 0.191619101717 \textcircled{3}$$

$$\text{Sin} \beta = - 0.12616171519 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - 0.15117141717 \textcircled{5}$$

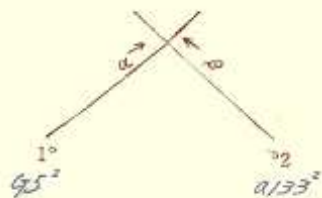
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0.14810171517 \\ \Delta X \times \textcircled{2} &= 0.16710171516 \\ F &= 11111.0171517 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11311.0171517$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0.11311.0171517 \\ X_2 &= - 6161511.01907 \\ X &= - 6161511.01907 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 11111.0171517 \\ Y_2 &= - 3171511.01818 \\ Y &= - 3171511.01818 \end{aligned}$$

算出點 11



$$\begin{aligned} 2133^{\circ} X_2 &= - 61616171 \cdot 12468 \\ 95^{\circ} X_1 &= - 61616171 \cdot 12458 \\ \Delta X &= - 11616171 \cdot 12410 \end{aligned}$$

$$\alpha = 1240'' - 95'' - 245''$$

$$\beta = 1240'' - 95'' - 1240''$$

$$\beta - \alpha = 1240'' - 245'' - 245''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11616171 \cdot 12458 \\ \Delta X \times \textcircled{4} &= + 11616171 \cdot 12458 \\ E &= 11616171 \cdot 12458 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11616171 \cdot 12458$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 9 \quad 11616171 \cdot 12458 \\ X_1 &= - 61616171 \cdot 12458 \\ X &= - 61616171 \cdot 12458 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \quad 11616171 \cdot 12458 \\ Y_1 &= - 61616171 \cdot 12458 \\ Y &= - 61616171 \cdot 12458 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 317671 \cdot 12458 \\ Y_1 &= - 317671 \cdot 12458 \\ \Delta Y &= - 11616171 \cdot 12458 \end{aligned}$$

$$\text{Cos} \alpha = 0 \cdot 11616171 \cdot 12458 \quad \textcircled{1}$$

$$\text{Sin} \alpha = + \cdot 11616171 \cdot 12458 \quad \textcircled{2}$$

$$\text{Cos} \beta = - \cdot 11616171 \cdot 12458 \quad \textcircled{3}$$

$$\text{Sin} \beta = 0 \cdot 11616171 \cdot 12458 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 11616171 \cdot 12458 \quad \textcircled{5}$$

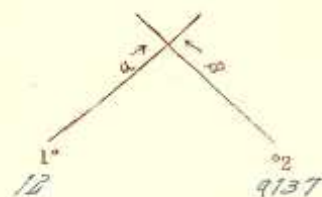
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 9 \quad 11616171 \cdot 12458 \\ \Delta X \times \textcircled{2} &= 9 \quad 11616171 \cdot 12458 \\ F &= 11616171 \cdot 12458 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11616171 \cdot 12458$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \quad 11616171 \cdot 12458 \\ X_2 &= - 61616171 \cdot 12458 \\ X &= - 61616171 \cdot 12458 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \quad 11616171 \cdot 12458 \\ Y_2 &= - 61616171 \cdot 12458 \\ Y &= - 61616171 \cdot 12458 \end{aligned}$$

算出點 5



$$\begin{aligned} 2127^{\circ} X_2 &= - 61616171 \cdot 10196 \\ 12^{\circ} X_1 &= - 61616171 \cdot 12456 \\ \Delta X &= - 11616171 \cdot 12468 \end{aligned}$$

$$\alpha = 1240'' - 12'' - 245''$$

$$\beta = 1240'' - 12'' - 1240''$$

$$\beta - \alpha = 1240'' - 245'' - 10''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11616171 \cdot 12458 \\ \Delta X \times \textcircled{4} &= + 11616171 \cdot 12458 \\ E &= 11616171 \cdot 12458 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11616171 \cdot 12458$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \quad 11616171 \cdot 12458 \\ X_1 &= - 61616171 \cdot 12456 \\ X &= - 61616171 \cdot 12456 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \quad 11616171 \cdot 12458 \\ Y_1 &= - 61616171 \cdot 12458 \\ Y &= - 61616171 \cdot 12458 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 31794 \cdot 12458 \\ Y_1 &= - 31794 \cdot 12458 \\ \Delta Y &= - 11616171 \cdot 12468 \end{aligned}$$

$$\text{Cos} \alpha = 0 \cdot 11616171 \cdot 12458 \quad \textcircled{1}$$

$$\text{Sin} \alpha = + \cdot 11616171 \cdot 12458 \quad \textcircled{2}$$

$$\text{Cos} \beta = + \cdot 11616171 \cdot 12458 \quad \textcircled{3}$$

$$\text{Sin} \beta = 0 \cdot 11616171 \cdot 12458 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 11616171 \cdot 12458 \quad \textcircled{5}$$

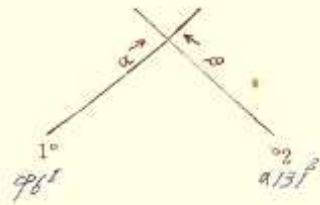
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0 \quad 11616171 \cdot 12458 \\ \Delta X \times \textcircled{2} &= 0 \quad 11616171 \cdot 12458 \\ F &= 11616171 \cdot 12458 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11616171 \cdot 12458$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \quad 11616171 \cdot 12458 \\ X_2 &= - 61616171 \cdot 10196 \\ X &= - 61616171 \cdot 10196 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \quad 11616171 \cdot 12458 \\ Y_2 &= - 61616171 \cdot 12458 \\ Y &= - 61616171 \cdot 12458 \end{aligned}$$

算出点 7



$$\begin{aligned} 48^\circ X_2 &= -65421.1488 \\ 78^\circ X_1 &= -65421.1488 \\ \Delta X &= -11180.1756 \end{aligned}$$

$$\begin{aligned} \alpha &= 172^\circ - 48^\circ - 131^\circ \\ \beta &= 130^\circ - 48^\circ - 131^\circ \\ \beta - \alpha &= 258^\circ - 48^\circ - 131^\circ \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +11180.1756 \\ \Delta X \times \textcircled{4} &= -11180.1756 \\ E &= 11180.1756 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11180.1756$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +11180.1756 \\ X_1 &= -65421.1488 \\ X &= -65421.1488 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +11180.1756 \\ Y_1 &= -31837.1415 \\ Y &= -31837.1415 \end{aligned}$$

$$\begin{aligned} Y_2 &= -31837.1415 \\ Y_1 &= -31837.1415 \\ \Delta Y &= -11180.1756 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= +0.1736481777 \textcircled{1} \\ \sin \alpha &= +0.9848077530 \textcircled{2} \\ \cos \beta &= +0.1736481777 \textcircled{3} \\ \sin \beta &= +0.9848077530 \textcircled{4} \\ \sin(\beta - \alpha) &= -0.1736481777 \textcircled{5} \end{aligned}$$

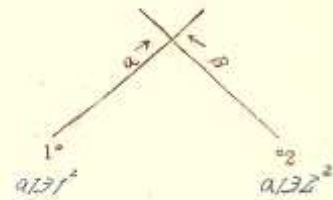
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +11180.1756 \\ \Delta X \times \textcircled{2} &= +11180.1756 \\ F &= 11180.1756 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11180.1756$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +11180.1756 \\ X_2 &= -65421.1488 \\ X &= -65421.1488 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= -11180.1756 \\ Y_2 &= -31837.1415 \\ Y &= -31837.1415 \end{aligned}$$

算出点 8



$$\begin{aligned} 132^\circ X_2 &= -65421.1488 \\ 132^\circ X_1 &= -65421.1488 \\ \Delta X &= -11180.1756 \end{aligned}$$

$$\begin{aligned} \alpha &= 132^\circ - 132^\circ - 132^\circ \\ \beta &= 132^\circ - 132^\circ - 132^\circ \\ \beta - \alpha &= 132^\circ - 132^\circ - 132^\circ \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +11180.1756 \\ \Delta X \times \textcircled{4} &= +11180.1756 \\ E &= 11180.1756 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 11180.1756$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +11180.1756 \\ X_1 &= -65421.1488 \\ X &= -65421.1488 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= -11180.1756 \\ Y_1 &= -31837.1415 \\ Y &= -31837.1415 \end{aligned}$$

$$\begin{aligned} Y_2 &= -31837.1415 \\ Y_1 &= -31837.1415 \\ \Delta Y &= -11180.1756 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= +0.1736481777 \textcircled{1} \\ \sin \alpha &= -0.9848077530 \textcircled{2} \\ \cos \beta &= -0.1736481777 \textcircled{3} \\ \sin \beta &= +0.9848077530 \textcircled{4} \\ \sin(\beta - \alpha) &= -0.1736481777 \textcircled{5} \end{aligned}$$

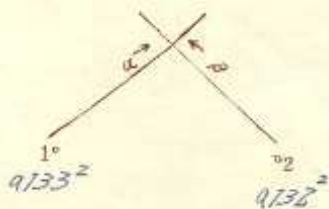
$$\begin{aligned} \Delta Y \times \textcircled{1} &= -11180.1756 \\ \Delta X \times \textcircled{2} &= -11180.1756 \\ F &= 11180.1756 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 11180.1756$$

$$\begin{aligned} S_2 \times \textcircled{3} &= -11180.1756 \\ X_2 &= -65421.1488 \\ X &= -65421.1488 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +11180.1756 \\ Y_2 &= -31837.1415 \\ Y &= -31837.1415 \end{aligned}$$

算出點 9



$$\begin{aligned} 97.33^\circ X_2 &= -6516151.1102 \\ 97.33^\circ X_1 &= -6517171.2448 \\ \Delta X &= -0.11121.1146 \end{aligned}$$

$$\alpha = 125^\circ - 121' - 19''$$

$$\beta = 97.33^\circ - 59' - 47''$$

$$\beta - \alpha = 100^\circ - 47' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1111.1111 \\ \Delta X \times \textcircled{4} &= +1111.1111 \\ E &= 1111.1111 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 1111.1111$$

$$\begin{aligned} S_1 \times \textcircled{1} &= \theta \\ X_1 &= -6517171.2448 \\ X &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \\ Y_1 &= -6517171.2448 \\ Y &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3123171.14519 \\ Y_1 &= -3123171.14519 \\ \Delta Y &= -1111.1111 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.181818181818 \textcircled{1} \\ \text{Sin} \alpha &= +0.181818181818 \textcircled{2} \\ \text{Cos} \beta &= +0.181818181818 \textcircled{3} \\ \text{Sin} \beta &= 0.181818181818 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.181818181818 \textcircled{5} \end{aligned}$$

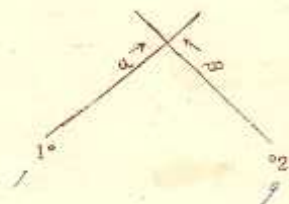
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 9111.1111 \\ \Delta X \times \textcircled{2} &= 9111.1111 \\ F &= 1111.1111 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 1111.1111$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \\ X_2 &= -6516151.1102 \\ X &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= \theta \\ Y_2 &= -6516151.1102 \\ Y &= -6516151.1102 \end{aligned}$$

算出點 10



$$\begin{aligned} 9 X_2 &= -6516151.1102 \\ 9 X_1 &= -6517171.2448 \\ \Delta X &= -2111.1111 \end{aligned}$$

$$\alpha = 125^\circ - 47' - 15''$$

$$\beta = 97.33^\circ - 121' - 19''$$

$$\beta - \alpha = 125^\circ - 47' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +1111.1111 \\ \Delta X \times \textcircled{4} &= +1111.1111 \\ E &= 1111.1111 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 1111.1111$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + \\ X_1 &= -6517171.2448 \\ X &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \\ Y_1 &= -6517171.2448 \\ Y &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3123171.14519 \\ Y_1 &= -3123171.14519 \\ \Delta Y &= -1111.1111 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +0.181818181818 \textcircled{1} \\ \text{Sin} \alpha &= +0.181818181818 \textcircled{2} \\ \text{Cos} \beta &= +0.181818181818 \textcircled{3} \\ \text{Sin} \beta &= 0.181818181818 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.181818181818 \textcircled{5} \end{aligned}$$

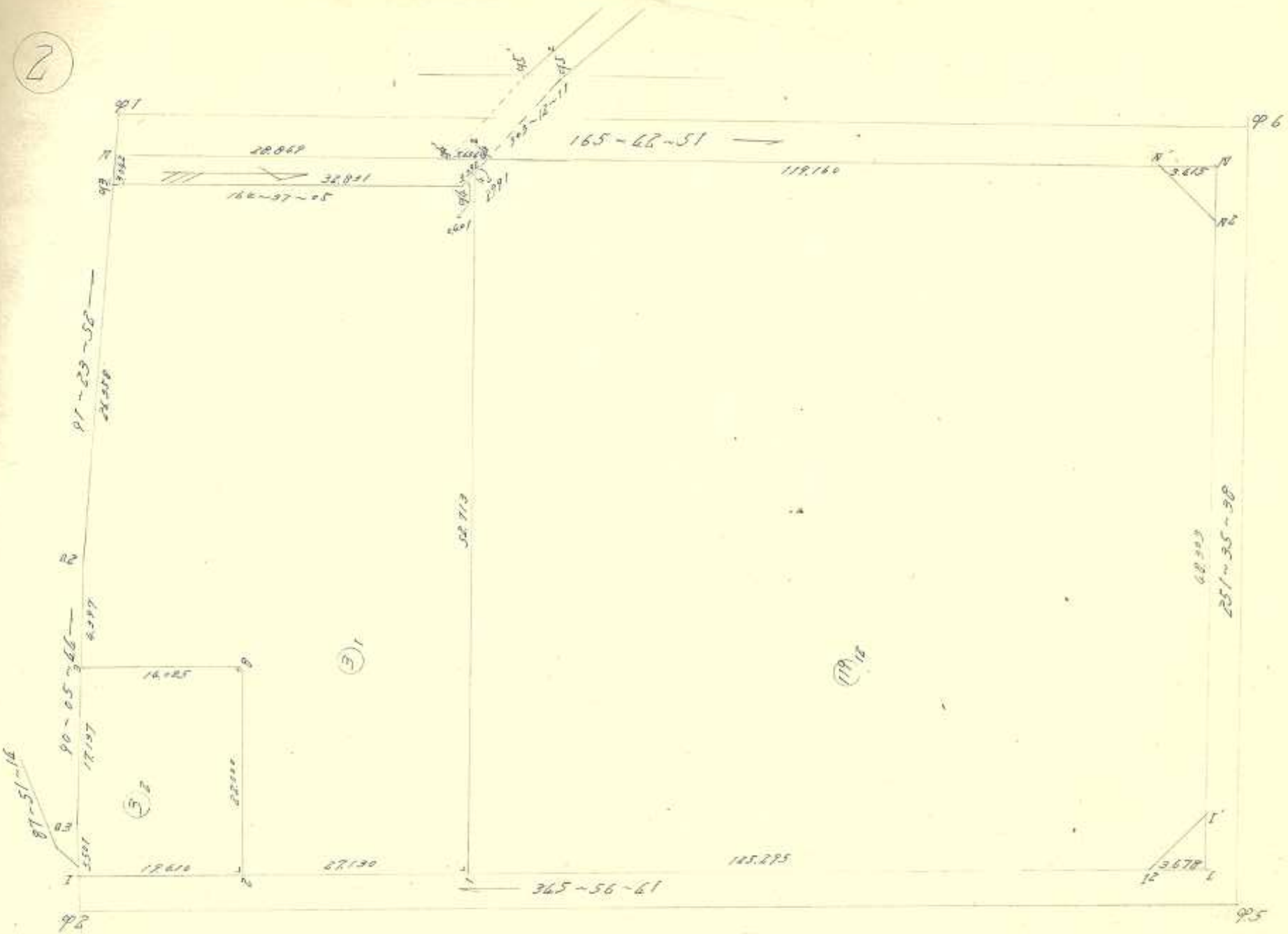
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1111.1111 \\ \Delta X \times \textcircled{2} &= 9111.1111 \\ F &= 1111.1111 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 1111.1111$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \\ X_2 &= -6516151.1102 \\ X &= -6516151.1102 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= \theta \\ Y_2 &= -6516151.1102 \\ Y &= -6516151.1102 \end{aligned}$$

2



各筆面積計算集計表

ブロック 番 号	各筆確定				備考	各筆番 号	面積		備考	
	各 筆 番 号	面 積 m ²	積 坪	積 坪			面 積 m ²	積 坪		
2	①	6961.702	2105.91	-	(町)					
	②	370.280	112.00	-						
	③	1714.080	518.51	-						
	④	87.177	26.39	-	7022外に付					
						計				
						m ²	坪			
						ブロック計算 = 2066.105	ブロック計算 = 2736.45			
						各筆集計 = 2066.062(-)	各筆集計 = 2736.40(-)			
						ε = .043	ε = .03			

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 ⑧	94 ²	6648.621	-	+ 31.581	3754.101	-	⊖ 5.677			276.1021	1708.564	
	96	6650.678	-	⊖ 33.512	3751.264	-	+ 11.545	582.769				1717.959
	93	6682.133	-	⊕ 31.581	3742.556	-	+ 5.677	466.269				1343.961
	91 ⁷	6682.059	-	+ 33.512	3745.587	-	⊖ 11.545		947.371	1537.712		

控除シクル値

X = 於テ 6600

y = 於テ 3700

$$\Sigma = \frac{11062.038}{25} = \frac{1223.392}{174.354} = \frac{2236.276}{174.356} = \frac{3061.920}{87.177}$$

S = 87.177
26.374 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑨	96 ¹⁰	6528.758	-	+ 12.637	3781.108	-	+ 48.229	1286.970		1592.718	
	95 ¹¹	6513.508	-	+ 12.844	3735.276	-	+ 50.215	678.304		453.085	
	95 ¹²	6515.914	-	⊖ 123.949	3730.893	-	+ 34.812	553.998			3829.156
	1	6637.457	-	⊖ 134.345	3700.464	-	⊖ 20.706		2846.185		62.336
	6	6650.259	-	⊖ 11.164	3751.599	-	⊖ 53.637		8059.442		576.051
	94 ²	6648.621	-	+ 117.114	3754.101	-	⊖ 31.906		4741.902	6335.985	
	96 ¹⁰	6533.145	-	+ 119.863	3783.505	-	⊖ 27.007		895.147	10009.160	

控除シクル値

X = 於テ 6500

y = 於テ 3700

$$\Sigma = \frac{2819.272}{25} = \frac{12973.406}{12973.405} = \frac{16542.676}{10390.948} = \frac{4467.543}{6961.702}$$

S = 6961.702
2.1059154 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
2 ③	8	6669.118	-	+ 19.006	3715.216	-	+ 17.920	342.595		1229.495	
	2	6663.775	-	⊖ 13.486	3693.875	-	+ 26.055	358.908			591.698
	92 ¹	6682.604	-	⊖ 19.035	3689.161	-	⊖ .783		25.529		745.430
	a3	6682.810	-	⊖ .177	3694.658	-	⊖ 22.634		742.620		7.904
	3	6682.781	-	+ 13.692	3711.795	-	⊖ 20.558		573.912	846.097	
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シクル値

X = 於テ

y = 於テ

$$\Sigma = \frac{701.503}{2S} = \frac{1442.063}{740.560} = \frac{2085.598}{740.560} = \frac{1345.032}{370.280} = 112.00^{24}$$

印
年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
2 ③	4	6650.259	-	⊕ 13.021	3751.599	-	+ 50.800	2553.157		802.481		
	1	6637.457	-	⊖ 13.526	3700.464	-	+ 57.984	2162.168			141.431	
	2	6663.775	-	⊖ 31.661	3693.875	-	⊕ 14.752		940.809		122.684	
	8	6669.118	-	⊕ 19.006	3715.216	-	⊕ 17.920		1238.595		479.455	
	3	6682.781	-	⊖ 13.657	3711.795	-	⊖ .980		81.125		297.654	
	a2	6682.775	-	+ .668	3716.196	-	⊕ 30.761		2546.242	16.975		
	93	6682.133	-	+ 32.297	3742.556	-	⊖ 35.068		2880.260	1497.401		
	94	6650.478	-	+ 31.874	3751.264	-	⊖ 9.043		456.473	1952.739		
				-			-					
				-			-					

控除シクル値

X = 於テ 6600

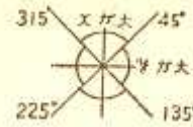
y = 於テ 3690

$$\Sigma = \frac{4715.325}{2S} = \frac{8143.484}{3428.159} = \frac{4469.186}{3428.160} = \frac{1041.026}{1714.080} = 518.51^{24}$$

印
年 月 日

多角点計算用紙

測量No.

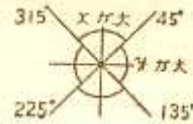


象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	95 ^I	° 1 "		° 1 "	.			.	.	.	.	6512.346	3731.786	95 ^I
95 ^I	95 ^{I2}			345 56 41	3.678			.	.	.	.	6515.914	3730.893	95 ^{I2}
95 ^{I2}	1			"	125.275			.	.	.	.	6637.457	3700.464	1
1	2	171.835		"	27.130			.	.	.	.	6663.775	3693.875	2
2	92 ^I			"	19.410			.	.	.	.	6682.604	3689.161	92 ^I
92 ^I	03			87 51 14	5.501			.	.	.	.	6682.810	3694.658	03
03	3	215.34		90 05 44	17.137			.	.	.	.	6682.781	3711.795	3
3	02			"	4.397			.	.	.	.	6682.775	3716.196	02
02	93	29.400		91 23 52	26.358			.	.	.	.	6682.133	3742.556	93
93	91 ^{II}			"	3.042			.	.	.	.	6682.059	3745.587	91 ^{II}
91 ^{II}	94 ^I			165 42 51	28.849			.	.	.	.	6654.102	3752.706	94 ^I
94 ^I	94 ^{I2}	153.665		"	5.656			.	.	.	.	6648.621	3756.101	94 ^{I2}
94 ^{I2}	96 ^{II}			"	119.160			.	.	.	.	6533.145	3782.505	96 ^{II}
96 ^{II}	96 ^{II}			"	3.415			.	.	.	.	6529.236	3784.348	96 ^{II}
96 ^{II}	96 ^{II}			251 35 38	3.415			.	.	.	.	6528.752	3781.108	96 ^{II}
96 ^{II}	95 ^{I2}			"	48.303			.	.	.	.	6513.508	3735.276	95 ^{I2}
95 ^{I2}	95 ^I			"	3.678			.	.	.	.	6512.346	3731.786	95 ^I

多角点計算用紙

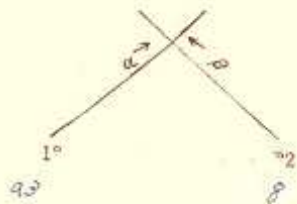
測量No. _____



象 限	I	+	/	+	/
	II		\	-	\
	III		/	-	/
	IV	+	\	+	\

測点	視点	内角	修正 角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	92 ¹	° 1 "		° 1 "	.	.	.	.	.	.	.	6682.604	3689.161	92 ¹
92 ²	2			165 56 41	19.470	242858	970062	18.869	4.714	.	.	6663.775	3693.875	2
8	8			75 56 41	22.000	.	.	5.343	21.341	.	.	6669.118	3715.216	8
	1		10	165 56 41	27.130	"	"	26.318	6.589	.	.	6627.657	3700.464	1
				
					.	.	.	.	.	.	.	6650.478	3751.264	94
					.	.	.	.	.	.	.	6649.239	3760.136	95 ¹
					.	.	.	.	.	.	.	6643.758	3761.532	95 ²
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				

算出點 3



$$\begin{aligned} E X_2 &= - 616191.17118 \\ 93 X_1 &= - 6161821.18110 \\ \Delta X &= - 011731.01092 \end{aligned}$$

$$\alpha = 128^\circ - 01' - 12''$$

$$\beta = 345^\circ - 56' - 47''$$

$$\beta - \alpha = 217^\circ - 55' - 35''$$

$$\begin{aligned} \Delta Y \times ③ &= + 1111.01111 \\ \Delta X \times ④ &= + 1111.01111 \\ E &= 1111.01111 \end{aligned}$$

$$S_1 = \frac{|E|}{⑤} = 1171.1131712$$

$$\begin{aligned} S_1 \times ① &= 0 \\ X_1 &= - 6161821.18110 \\ X &= - 6161821.17811 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= + 1111.01111 \\ Y_1 &= - 3161914.16158 \\ Y &= - 3171111.17195 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 3171111.17195 \\ Y_1 &= - 3161914.16158 \\ \Delta Y &= + 1171.01037 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0.111111111111 \text{ ①} \\ \sin \alpha &= + 0.111111111111 \text{ ②} \\ \cos \beta &= + 0.111111111111 \text{ ③} \\ \sin \beta &= 0.111111111111 \text{ ④} \\ \sin(\beta - \alpha) &= - 0.111111111111 \text{ ⑤} \end{aligned}$$

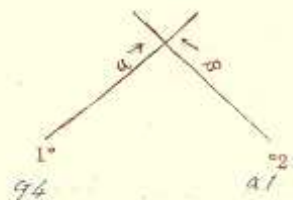
$$\begin{aligned} \Delta Y \times ① &= 0 \\ \Delta X \times ② &= 0 \\ F &= 1111.01111 \end{aligned}$$

$$S_2 = \frac{|F|}{⑥} = 1111.01111$$

$$\begin{aligned} S_2 \times ③ &= + 1111.01111 \\ X_2 &= - 616191.17118 \\ X &= - 6161821.17811 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= 0 \\ Y_2 &= - 3171111.17195 \\ Y &= - 3171111.17195 \end{aligned}$$

算出點 93



$$\begin{aligned} 94 X_2 &= - 6161821.18110 \\ 96 X_1 &= - 6161821.18110 \\ \Delta X &= - 1171.01092 \end{aligned}$$

$$\alpha = 128^\circ - 01' - 12''$$

$$\beta = 345^\circ - 56' - 47''$$

$$\beta - \alpha = 217^\circ - 55' - 35''$$

$$\begin{aligned} \Delta Y \times ③ &= - 1111.01111 \\ \Delta X \times ④ &= - 1111.01111 \\ E &= 1111.01111 \end{aligned}$$

$$S_1 = \frac{|E|}{⑤} = 1171.1131712$$

$$\begin{aligned} S_1 \times ① &= + 1111.01111 \\ X_1 &= - 6161821.18110 \\ X &= - 6161821.17811 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= 0 \\ Y_1 &= - 3161914.16158 \\ Y &= - 3171111.17195 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 3171111.17195 \\ Y_1 &= - 3161914.16158 \\ \Delta Y &= + 1171.01037 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= + 0.111111111111 \text{ ①} \\ \sin \alpha &= 0.111111111111 \text{ ②} \\ \cos \beta &= + 0.111111111111 \text{ ③} \\ \sin \beta &= 0.111111111111 \text{ ④} \\ \sin(\beta - \alpha) &= - 0.111111111111 \text{ ⑤} \end{aligned}$$

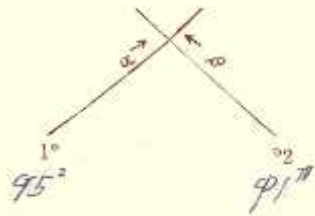
$$\begin{aligned} \Delta Y \times ① &= - 1111.01111 \\ \Delta X \times ② &= - 1111.01111 \\ F &= 1111.01111 \end{aligned}$$

$$S_2 = \frac{|F|}{⑥} = 1111.01111$$

$$\begin{aligned} S_2 \times ③ &= + 1111.01111 \\ X_2 &= - 616191.17118 \\ X &= - 6161821.17811 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= 0 \\ Y_2 &= - 3171111.17195 \\ Y &= - 3171111.17195 \end{aligned}$$

算出點 94^2



$$\begin{aligned} 91^\circ X_2 &= - 6161821 \cdot 10519 \\ 95^\circ X_1 &= - 6161431 \cdot 17518 \\ \Delta X &= - 113181 \cdot 13101 \end{aligned}$$

$$\begin{aligned} \alpha &= 603^\circ - 12' - 11'' \\ \beta &= 165^\circ - 42' - 15'' \\ \beta - \alpha &= 102^\circ - 30' - 49'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11181 \cdot 145193 \\ \Delta X \times \textcircled{4} &= + 11191 \cdot 145112 \\ E &= 1116 \cdot 610081 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 1181 \cdot 188104$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 1114 \cdot 18163 \\ X_1 &= - 161431 \cdot 17518 \\ X &= - 616181 \cdot 16211 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 1117 \cdot 14311 \\ Y_1 &= - 317611 \cdot 15132 \\ Y &= - 317512 \cdot 17011 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 317451 \cdot 151817 \\ Y_1 &= - 317611 \cdot 15132 \\ \Delta Y &= - 111151 \cdot 19415 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= + 15147161018 \textcircled{1} \\ \text{Sin} \alpha &= - 181316171315 \textcircled{2} \\ \text{Cos} \beta &= - 191619101717 \textcircled{3} \\ \text{Sin} \beta &= + 121461715191 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - 161715171313 \textcircled{5} \end{aligned}$$

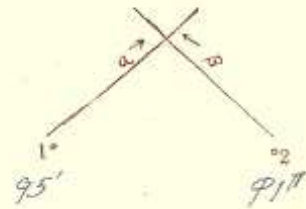
$$\begin{aligned} \Delta Y \times \textcircled{1} &= - 91118 \cdot 1931161 \\ \Delta X \times \textcircled{2} &= - 9132 \cdot 1087719 \\ F &= 11231 \cdot 1316118 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 1311 \cdot 150150$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - 11311 \cdot 14318 \\ X_2 &= - 6161821 \cdot 10519 \\ X &= - 616181 \cdot 16211 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 11181 \cdot 15114 \\ Y_2 &= - 317451 \cdot 151817 \\ Y &= - 317512 \cdot 17011 \end{aligned}$$

算出點 $94'$



$$\begin{aligned} 91' X_2 &= - 6161821 \cdot 10519 \\ 95' X_1 &= - 6161491 \cdot 17519 \\ \Delta X &= - 113121 \cdot 18210 \end{aligned}$$

$$\begin{aligned} \alpha &= 603^\circ - 12' - 11'' \\ \beta &= 165^\circ - 42' - 15'' \\ \beta - \alpha &= 102^\circ - 30' - 49'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11181 \cdot 145193 \\ \Delta X \times \textcircled{4} &= + 11191 \cdot 145112 \\ E &= 1116 \cdot 610087 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 1181 \cdot 1871919$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 1114 \cdot 18163 \\ X_1 &= - 161431 \cdot 17518 \\ X &= - 616181 \cdot 16211 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 1117 \cdot 14311 \\ Y_1 &= - 317611 \cdot 15132 \\ Y &= - 317512 \cdot 17011 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 317451 \cdot 151817 \\ Y_1 &= - 317611 \cdot 15132 \\ \Delta Y &= - 111151 \cdot 19419 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= + 15147161018 \textcircled{1} \\ \text{Sin} \alpha &= - 181316171315 \textcircled{2} \\ \text{Cos} \beta &= - 191619101717 \textcircled{3} \\ \text{Sin} \beta &= + 121461715191 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - 161715171313 \textcircled{5} \end{aligned}$$

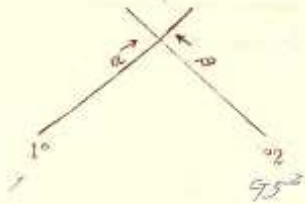
$$\begin{aligned} \Delta Y \times \textcircled{1} &= - 91117 \cdot 1931161 \\ \Delta X \times \textcircled{2} &= - 9137 \cdot 1087614 \\ F &= 1119 \cdot 139249 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 1211 \cdot 150194$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - 11311 \cdot 14318 \\ X_2 &= - 6161821 \cdot 10519 \\ X &= - 616181 \cdot 16211 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 11181 \cdot 15114 \\ Y_2 &= - 317451 \cdot 151817 \\ Y &= - 317512 \cdot 17011 \end{aligned}$$

算出点	4
-----	---



$$\begin{aligned}
 X_2 &= - 816131.1758 \\
 X_1 &= - 616131.1758 \\
 \Delta X &= - 11161.0101
 \end{aligned}$$

$$\alpha = 125^\circ - 56' - 48''$$

$$\beta = 55^\circ - 12' - 11''$$

$$\beta - \alpha = 227^\circ - 15' - 50''$$

$$\begin{aligned}
 \Delta Y \times \textcircled{3} &= 11161.0101 \\
 \Delta X \times \textcircled{4} &= 91154.1272 \\
 E &= 11318.1773
 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 1561.1711$$

$$\begin{aligned}
 S_1 \times \textcircled{1} &= + 11161.0101 \\
 X_1 &= - 616131.1758 \\
 X &= - 616131.1758
 \end{aligned}$$

$$\begin{aligned}
 S_1 \times \textcircled{2} &= + 11161.0101 \\
 Y_1 &= - 616131.1758 \\
 Y &= - 616131.1758
 \end{aligned}$$

$$\begin{aligned}
 Y_2 &= - 317161.1512 \\
 Y_1 &= - 117161.1512 \\
 \Delta Y &= - 11161.0101
 \end{aligned}$$

$$\begin{aligned}
 \text{Cos} \alpha &= + 0.5712 \textcircled{1} \\
 \text{Sin} \alpha &= + 0.9171 \textcircled{2} \\
 \text{Cos} \beta &= + 0.5147 \textcircled{3} \\
 \text{Sin} \beta &= 0.8131 \textcircled{4} \\
 \text{Sin}(\beta - \alpha) &= - 0.1714 \textcircled{5}
 \end{aligned}$$

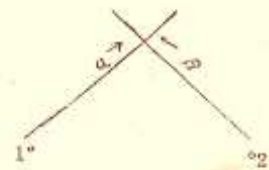
$$\begin{aligned}
 \Delta Y \times \textcircled{1} &= 7114.8308 \\
 \Delta X \times \textcircled{2} &= 11161.0101 \\
 F &= 11181.1713
 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = 1111.1812$$

$$\begin{aligned}
 S_2 \times \textcircled{3} &= + 11161.0101 \\
 X_2 &= - 616131.1758 \\
 X &= - 616131.1758
 \end{aligned}$$

$$\begin{aligned}
 S_2 \times \textcircled{4} &= 0 \\
 Y_2 &= - 616131.1758 \\
 Y &= - 616131.1758
 \end{aligned}$$

算出点	
-----	--



$$\begin{aligned}
 X_2 &= - \dots \\
 X_1 &= - \dots \\
 \Delta X &= - \dots
 \end{aligned}$$

$$\begin{aligned}
 \alpha &= \dots \\
 \beta &= \dots \\
 \beta - \alpha &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \Delta Y \times \textcircled{3} &= - \dots \\
 \Delta X \times \textcircled{4} &= - \dots \\
 E &= \dots
 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = \dots$$

$$\begin{aligned}
 S_1 \times \textcircled{1} &= - \dots \\
 X_1 &= - \dots \\
 X &= - \dots
 \end{aligned}$$

$$\begin{aligned}
 S_1 \times \textcircled{2} &= - \dots \\
 Y_1 &= - \dots \\
 Y &= - \dots
 \end{aligned}$$

$$\begin{aligned}
 Y_2 &= - \dots \\
 Y_1 &= - \dots \\
 \Delta Y &= - \dots
 \end{aligned}$$

$$\begin{aligned}
 \text{Cos} \alpha &= - \dots \textcircled{1} \\
 \text{Sin} \alpha &= - \dots \textcircled{2} \\
 \text{Cos} \beta &= - \dots \textcircled{3} \\
 \text{Sin} \beta &= - \dots \textcircled{4} \\
 \text{Sin}(\beta - \alpha) &= - \dots \textcircled{5}
 \end{aligned}$$

$$\begin{aligned}
 \Delta Y \times \textcircled{1} &= - \dots \\
 \Delta X \times \textcircled{2} &= - \dots \\
 F &= \dots
 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = \dots$$

$$\begin{aligned}
 S_2 \times \textcircled{3} &= - \dots \\
 X_2 &= - \dots \\
 X &= - \dots
 \end{aligned}$$

$$\begin{aligned}
 S_2 \times \textcircled{4} &= - \dots \\
 Y_2 &= - \dots \\
 Y &= - \dots
 \end{aligned}$$

$$\begin{aligned} 94^\circ X_2 &= 161615101 \cdot 12178 \\ 75^\circ X_1 &= 161614131 \cdot 1758 \\ \hline \Delta X &= - \quad 111161 \cdot 17210 \end{aligned} \qquad \begin{aligned} Y_2 &= 1317611 \cdot 1266 \\ Y_1 &= 1317611 \cdot 15312 \\ \hline \Delta Y &= - \quad 111161 \cdot 1268 \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y & \quad | \cdot | | | | | | | | | | \\ \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \hline \text{Logtan} B & \quad | \cdot | 1521719761 \\ B & \quad | 11^\circ - 47' - 49'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y & \quad | \cdot | | | | | | | | | | & \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \text{Logsin} B & \quad | \cdot | | | | | | | | | | & \text{Logcos} B & \quad | \cdot | | | | | | | | | | \\ \hline \text{Log} D & \quad | \cdot | 161614131 & \text{Log} D & \quad | \cdot | 161614131 \end{aligned}$$

$$\begin{aligned} \Delta x_2 &= | | | | \cdot | | | | | | | | | | \\ \Delta y_2 &= | | | | \cdot | | | | | | | | | | \\ \hline D_1 &= | | | | \cdot | | | | | | | | | | \\ D &= | | | | \cdot | | | | | | | | | | \end{aligned}$$

距離 = $| | | | K | | | |$
方位角 $a = 3013^\circ - 24' - 11''$

ΔX	ΔY	B, 在 a 象限	Xヲ出スニハ
+	+	I	B
-	+	II	$180^\circ - B$
-	-	III	$180^\circ + B$
+	-	IV	$360^\circ - B$

$$\begin{aligned} X_2 &= | | | | \cdot | | | | | | | | | | \\ X_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta X &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned} \qquad \begin{aligned} Y_2 &= | | | | \cdot | | | | | | | | | | \\ Y_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta y &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta y & \quad | \cdot | | | | | | | | | | \\ \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \hline \text{Logtan} B & \quad | \cdot | | | | | | | | | | \\ B & \quad | | | |^\circ - | |' - | |'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta y & \quad | \cdot | | | | | | | | | | & \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \text{Logsin} B & \quad | \cdot | | | | | | | | | | & \text{Logcos} B & \quad | \cdot | | | | | | | | | | \\ \hline \text{Log} D & \quad | \cdot | | | | | | | | | | & \text{Log} D & \quad | \cdot | | | | | | | | | | \end{aligned}$$

$$\begin{aligned} \Delta x_2 &= | | | | \cdot | | | | | | | | | | \\ \Delta y_2 &= | | | | \cdot | | | | | | | | | | \\ \hline D_2 &= | | | | \cdot | | | | | | | | | | \\ D &= | | | | \cdot | | | | | | | | | | \end{aligned}$$

距離 = $| | | | K | | | |$
方位角 $a = | | | |^\circ - | |' - | |''$

$$\begin{aligned} X_2 &= | | | | \cdot | | | | | | | | | | \\ X_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta X &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned} \qquad \begin{aligned} Y_2 &= | | | | \cdot | | | | | | | | | | \\ Y_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta Y &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y & \quad | \cdot | | | | | | | | | | \\ \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \hline \text{Logtan} B & \quad | \cdot | | | | | | | | | | \\ B & \quad | | | |^\circ - | |' - | |'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y & \quad | \cdot | | | | | | | | | | & \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \text{Logsin} B & \quad | \cdot | | | | | | | | | | & \text{Logcos} B & \quad | \cdot | | | | | | | | | | \\ \hline \text{Log} D & \quad | \cdot | | | | | | | | | | & \text{Log} D & \quad | \cdot | | | | | | | | | | \end{aligned}$$

$$\begin{aligned} \Delta x_2 &= | | | | \cdot | | | | | | | | | | \\ \Delta y_2 &= | | | | \cdot | | | | | | | | | | \\ \hline D_2 &= | | | | \cdot | | | | | | | | | | \\ D &= | | | | \cdot | | | | | | | | | | \end{aligned}$$

距離 = $| | | | K | | | |$
方位角 $a = | | | |^\circ - | |' - | |''$

$$\begin{aligned} X_2 &= | | | | \cdot | | | | | | | | | | \\ X_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta X &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned} \qquad \begin{aligned} Y_2 &= | | | | \cdot | | | | | | | | | | \\ Y_1 &= | | | | \cdot | | | | | | | | | | \\ \hline \Delta y &= - \quad | | | | \cdot | | | | | | | | | | \end{aligned}$$

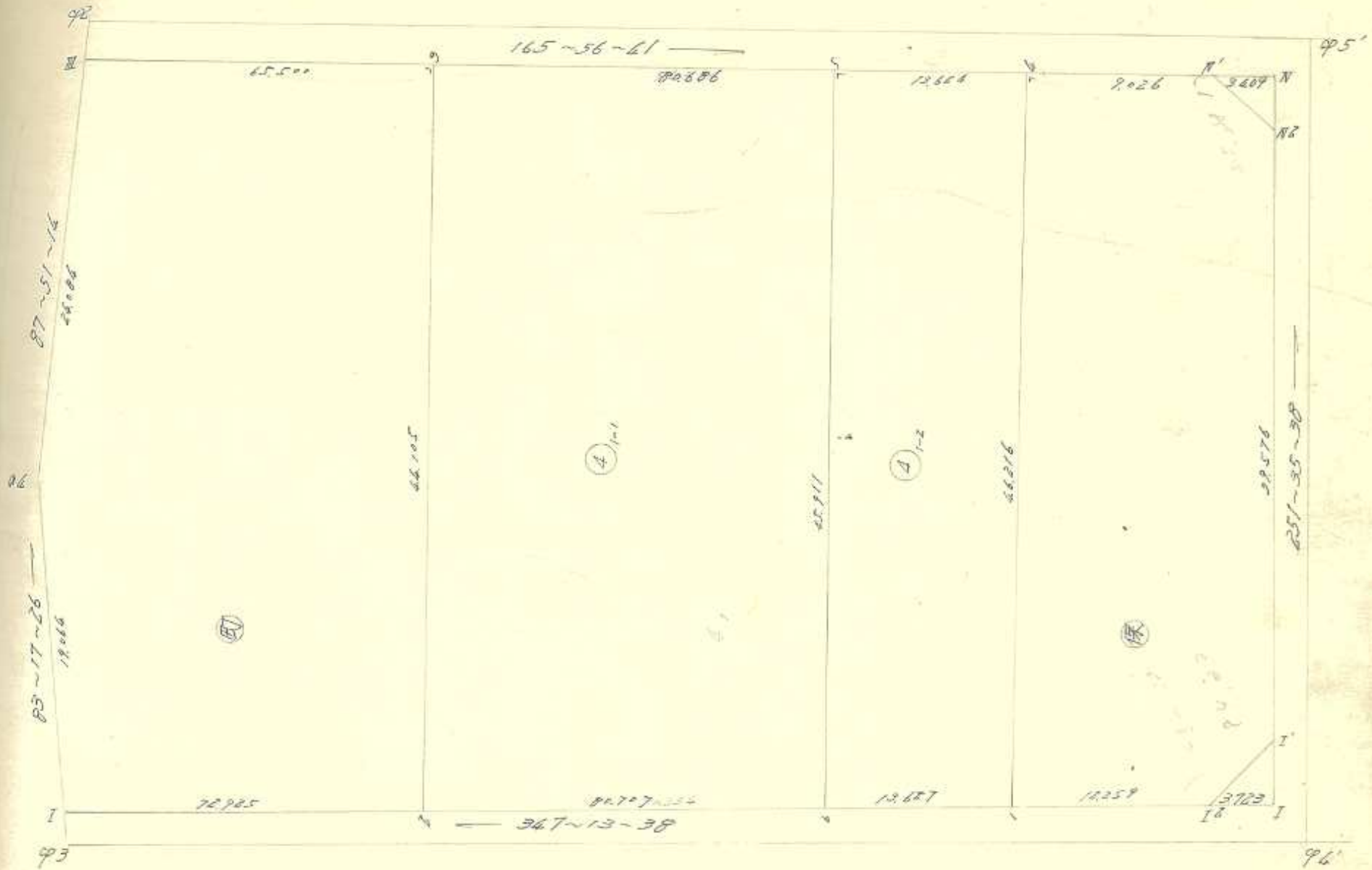
$$\begin{aligned} \text{Log} \Delta y & \quad | \cdot | | | | | | | | | | \\ \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \hline \text{Logtan} B & \quad | \cdot | | | | | | | | | | \\ B & \quad | | | |^\circ - | |' - | |'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta y & \quad | \cdot | | | | | | | | | | & \text{Log} \Delta X & \quad | \cdot | | | | | | | | | | \\ \text{Logsin} B & \quad | \cdot | | | | | | | | | | & \text{Logcos} B & \quad | \cdot | | | | | | | | | | \\ \hline \text{Log} D & \quad | \cdot | | | | | | | | | | & \text{Log} D & \quad | \cdot | | | | | | | | | | \end{aligned}$$

$$\begin{aligned} \Delta x_2 &= | | | | \cdot | | | | | | | | | | \\ \Delta y_2 &= | | | | \cdot | | | | | | | | | | \\ \hline D_2 &= | | | | \cdot | | | | | | | | | | \\ D &= | | | | \cdot | | | | | | | | | | \end{aligned}$$

距離 = $| | | | K | | | |$
方位角 $a = | | | |^\circ - | |' - | |''$

3



面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
3	1	6,618.835	-	+ 74.250	3,698.940	-	+ 26.877	506.228		9,346.295	
4	2	6,608.124	-	0 60.409	3,656.156	-	+ 58.907	478.560			3,392.328
5	3	6,679.244	-	0 73.348	3,640.033	-	0 2.810		202.676		2,936.340
6	4	6,681.472	-	0 3.130	3,658.966	-	0 43.000		3503.296		184.564
7	5	6,682.374	-	+ 62.637	3,683.033	-	0 39.974		3092.818	5,200.938	

控除シタル値

X = 於テ 6,600

y = 於テ 3,600

$\bar{x} = \frac{984.788}{38} = 25.915$ $\bar{y} = \frac{7018.790}{38} = 184.705$ $\bar{xy} = \frac{12,547.233}{38} = 330.190$ $\bar{x^2} = \frac{6,513.838}{38} = 171.422$

$2S = \frac{6,034.002}{38} = 158.789$

$S = \frac{6,034.001}{38} = 158.789$

$S = \frac{2017.001}{38} = 53.079$

912.667

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
3	4	6,527.348	-	+ 102.711	3,721.844	-	+ 21.929	599.714		7,379.169	
4	1	6,516.104	-	0 80.776	3,677.011	+	+ 65.688	1,059.153			2,181.861
5	2	6,608.124	-	0 102.711	3,656.156	-	0 21.929		2,371.051		632.289
6	3	6,618.835	-	+ 80.776	3,698.940	-	0 65.688		780.603	3,953.177	

控除シタル値

X = 於テ 6,500

y = 於テ 3,650

$\bar{x} = \frac{1638.867}{38} = 43.154$ $\bar{y} = \frac{19,177.088}{38} = 504.660$ $\bar{xy} = \frac{11,332.346}{38} = 298.220$ $\bar{x^2} = \frac{28,14.130}{38} = 74.056$

$2S = \frac{8,518.217}{38} = 224.165$

$S = \frac{8,518.216}{38} = 224.164$

$S = \frac{4,259.108}{38} = 112.082$

1,288.389

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	95 ¹¹	6514.210	-	+ 16.879	3721.629	-	+ 39.957	567.789		871.446	
筆番号	94 ¹¹	6501.714	-	+ 10.641	3684.079	-	+ 41.906	71.827		141.367	
	94 ¹²	6504.169	-	0 14.410	3679.723	-	+ 7.068	29.466			140.108
	1	6516.124	-	0 23.179	3677.011	-	0 42.121		679.159		162.508
	4	6527.348	-	0 2.469	3721.844	-	0 47.025		1286.040		128.003
	95 ¹¹	6518.593	-	+ 13.138	3724.036	-	+ 0.215	3.997		709.925	
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値

Xニ於テ 6500.-

Yニ於テ 3670.-

$$\Sigma = 173.1791965 \quad 1991722 \quad 738.430.619$$

$$2S = 1292.120 \quad 1292.119$$

$$S = 646.060$$

195.4328

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値

Xニ於テ

Yニ於テ

$$M =$$

$$2S =$$

$$S =$$

年 月 日

面積計算用紙

街廓番号	NO	X _n (1)	X _n -X _{n+1} (2)	ΔX+ΔX _{n+1} (3)	Y _n (4)	Y _n -Y _{n+1} (5)	Δy _n +Δy _{n+1} (6)	(1) × (6)		(3) × (4)	
								+	-	+	-
3											
扉番号	4	6587.249		+ 24.240	5781.844		+ 21.528	1135.598		2977.867	
(2)	1	6516.124		- 2.646	3477.011		+	47.845	771.453		159.105
1-2	2	6589.412		24.240	5673.999		0	41.584		1211.987	2808.536
	5	6540.564		+ 2.666	5718.535		0	47.845		1940.785	244.893

控除シタル値

X = 於テ 85 00
 y = 於テ 36 00

Σ = 1927.051 3162.172 3468.760 1917.641

2S = 1255.1211 2855.119

S = 627.5605

109.84 年 月 日

面積計算用紙

街廓番号	NO	X _n (1)	X _n -X _{n+1} (2)	ΔX+ΔX _{n+1} (3)	Y _n (4)	Y _n -Y _{n+1} (5)	Δy _n +Δy _{n+1} (6)	(1) × (6)		(3) × (4)	
								+	-	+	-

控除シタル値

X = 於テ _____
 y = 於テ _____

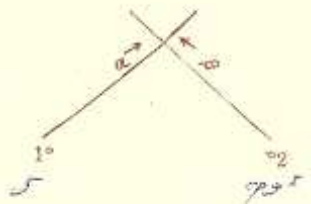
Σ = _____

2S = _____

S = _____

年 月 日

算出点 6



$$\begin{aligned}
 X_2 &= - \dots \\
 X_1 &= - \dots \\
 \Delta X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \alpha &= \dots \\
 \beta &= \dots \\
 \beta - \alpha &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \Delta Y \times \text{③} &= \dots \\
 \Delta X \times \text{④} &= \dots \\
 E &= \dots
 \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = \dots$$

$$\begin{aligned}
 S_1 \times \text{①} &= \dots \\
 X_1 &= \dots \\
 X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 S_1 \times \text{②} &= \dots \\
 Y_1 &= \dots \\
 Y &= \dots
 \end{aligned}$$

$$\begin{aligned}
 Y_2 &= - \dots \\
 Y_1 &= - \dots \\
 \Delta Y &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \text{Cos} \alpha &= \dots \text{①} \\
 \text{Sin} \alpha &= \dots \text{②} \\
 \text{Cos} \beta &= \dots \text{③} \\
 \text{Sin} \beta &= \dots \text{④} \\
 \text{Sin}(\beta - \alpha) &= \dots \text{⑤}
 \end{aligned}$$

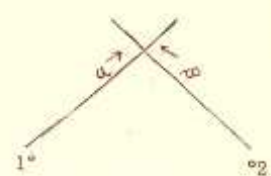
$$\begin{aligned}
 \Delta Y \times \text{①} &= \dots \\
 \Delta X \times \text{③} &= \dots \\
 F &= \dots
 \end{aligned}$$

$$S_2 = \left| \frac{F}{\text{⑥}} \right| = \dots$$

$$\begin{aligned}
 S_2 \times \text{③} &= \dots \\
 X_2 &= \dots \\
 X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 S_2 \times \text{④} &= \dots \\
 Y_2 &= \dots \\
 Y &= \dots
 \end{aligned}$$

算出点



$$\begin{aligned}
 X_2 &= - \dots \\
 X_1 &= - \dots \\
 \Delta X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \alpha &= \dots \\
 \beta &= \dots \\
 \beta - \alpha &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \Delta Y \times \text{③} &= \dots \\
 \Delta X \times \text{④} &= \dots \\
 E &= \dots
 \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = \dots$$

$$\begin{aligned}
 S_1 \times \text{①} &= \dots \\
 X_1 &= \dots \\
 X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 S_1 \times \text{②} &= \dots \\
 Y_1 &= \dots \\
 Y &= \dots
 \end{aligned}$$

$$\begin{aligned}
 Y_2 &= - \dots \\
 Y_1 &= - \dots \\
 \Delta Y &= \dots
 \end{aligned}$$

$$\begin{aligned}
 \text{Cos} \alpha &= \dots \text{①} \\
 \text{Sin} \alpha &= \dots \text{②} \\
 \text{Cos} \beta &= \dots \text{③} \\
 \text{Sin} \beta &= \dots \text{④} \\
 \text{Sin}(\beta - \alpha) &= \dots \text{⑤}
 \end{aligned}$$

$$\begin{aligned}
 \Delta Y \times \text{①} &= \dots \\
 \Delta X \times \text{②} &= \dots \\
 F &= \dots
 \end{aligned}$$

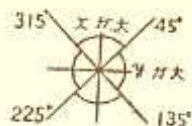
$$S_2 = \left| \frac{F}{\text{⑥}} \right| = \dots$$

$$\begin{aligned}
 S_2 \times \text{③} &= \dots \\
 X_2 &= \dots \\
 X &= \dots
 \end{aligned}$$

$$\begin{aligned}
 S_2 \times \text{④} &= \dots \\
 Y_2 &= \dots \\
 Y &= \dots
 \end{aligned}$$

多角点計算用紙

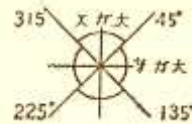
測量No. _____



象 限	I	+	+	+
	II	-	-	+
限	III	-	+	-
	IV	+	-	-

測点	視点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	94 ^I	"	"	"	"									
94 ^I	94 ^I			347 13 38	3.723							6500.538	3680.546	94 ^I
94 ^I	1			"	12.259							6504.169	3679.723	94 ^I
1	2	178.518		"	94.334							6516.124	3677.011	1
2	93 ^I			"	72.925							6608.124	3656.156	2
93 ^I	06			83 17 26	19.064							6679.264	3640.033	93 ^I
06	92 ^{II}			87 51 14	24.084							6681.470	3658.966	06
92 ^{II}	3			165 56 41	65.500							6682.374	3683.033	92 ^{II}
3	4	168.836		"	94.310							6618.835	3698.940	3
4	95 ^{III}			"	9.026							6527.348	3721.844	4
95 ^{III}	95 ^{III}			"	3.609							6518.593	3724.036	95 ^{III}
95 ^{III}	95 ^{III}			251 35 38	3.609							6515.286	3724.864	95 ^{III}
95 ^{III}	94 ^I			"	39.576							6514.210	3721.629	95 ^{III}
94 ^I	94 ^I			"	3.723							6501.714	3684.079	94 ^I
												6500.538	3680.546	94 ^I

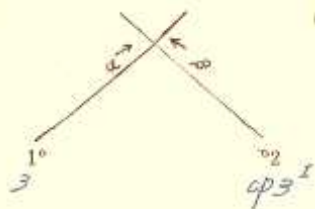
測量No. _____



象 限	I	+	/	+	/
	II	/	-	+	/
	III	/	-	/	-
	IV	+	/	/	-

測点	観点	内 角		修正角量	方位角		辺 長	真 数		辺 の X		辺 の Y		点 の 座 標		点
								Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	92 ^号	"	"	"	"	"	.	.	.	.	.	.	6682.376	3653.033	92 ^号	
92 ^号	3				165 56 41	65.500	142.858	970.062	.	63.539	15.907	.	6678.835	3698.960	3	
3	4				.	94.910	"	"	.	91.487	28.904	.	6527.348	3721.866	4	
4	5				345 56 41	17.644	"	"	⑨	13.816	.	3.389	6540.564	3718.535	5	

算出点 2



$$\begin{aligned} \sin^2 X_2 &= - 6161710.16146 \\ \sin^2 X_1 &= - 6161710.16146 \\ \Delta X &= - 116101.16108 \end{aligned}$$

$$\begin{aligned} \alpha &= 125^\circ - 15' - 16'' \\ \beta &= 167^\circ - 10' - 38'' \\ \beta - \alpha &= 142^\circ - 16' - 15'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 116101.16108 \\ \Delta X \times \textcircled{4} &= + 116101.16108 \\ E &= 116101.16108 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 116101.16108$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \\ X_1 &= - 6161710.16146 \\ X &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \\ Y_1 &= - 6161710.16146 \\ Y &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 6161710.16146 \\ Y_1 &= - 6161710.16146 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0 \cdot 116101.16108 \textcircled{1} \\ \sin \alpha &= 0 \cdot 116101.16108 \textcircled{2} \\ \cos \beta &= 0 \cdot 116101.16108 \textcircled{3} \\ \sin \beta &= + \cdot 116101.16108 \textcircled{4} \\ \sin(\beta - \alpha) &= - \cdot 116101.16108 \textcircled{5} \end{aligned}$$

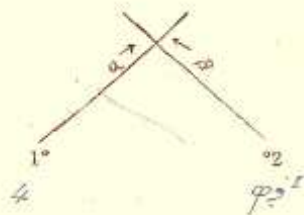
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 116101.16108 \\ \Delta X \times \textcircled{2} &= + 116101.16108 \\ F &= 116101.16108 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 116101.16108$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \\ X_2 &= - 6161710.16146 \\ X &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \\ Y_2 &= - 6161710.16146 \\ Y &= - 6161710.16146 \end{aligned}$$

算出点 1



$$\begin{aligned} \sin^2 X_2 &= - 6161710.16146 \\ \sin^2 X_1 &= - 6161710.16146 \\ \Delta X &= - 116101.16108 \end{aligned}$$

$$\begin{aligned} \alpha &= 125^\circ - 15' - 16'' \\ \beta &= 167^\circ - 10' - 38'' \\ \beta - \alpha &= 142^\circ - 16' - 15'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 116101.16108 \\ \Delta X \times \textcircled{4} &= + 116101.16108 \\ E &= 116101.16108 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 116101.16108$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \\ X_1 &= - 6161710.16146 \\ X &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \\ Y_1 &= - 6161710.16146 \\ Y &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 6161710.16146 \\ Y_1 &= - 6161710.16146 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0 \cdot 116101.16108 \textcircled{1} \\ \sin \alpha &= 0 \cdot 116101.16108 \textcircled{2} \\ \cos \beta &= 0 \cdot 116101.16108 \textcircled{3} \\ \sin \beta &= + \cdot 116101.16108 \textcircled{4} \\ \sin(\beta - \alpha) &= - \cdot 116101.16108 \textcircled{5} \end{aligned}$$

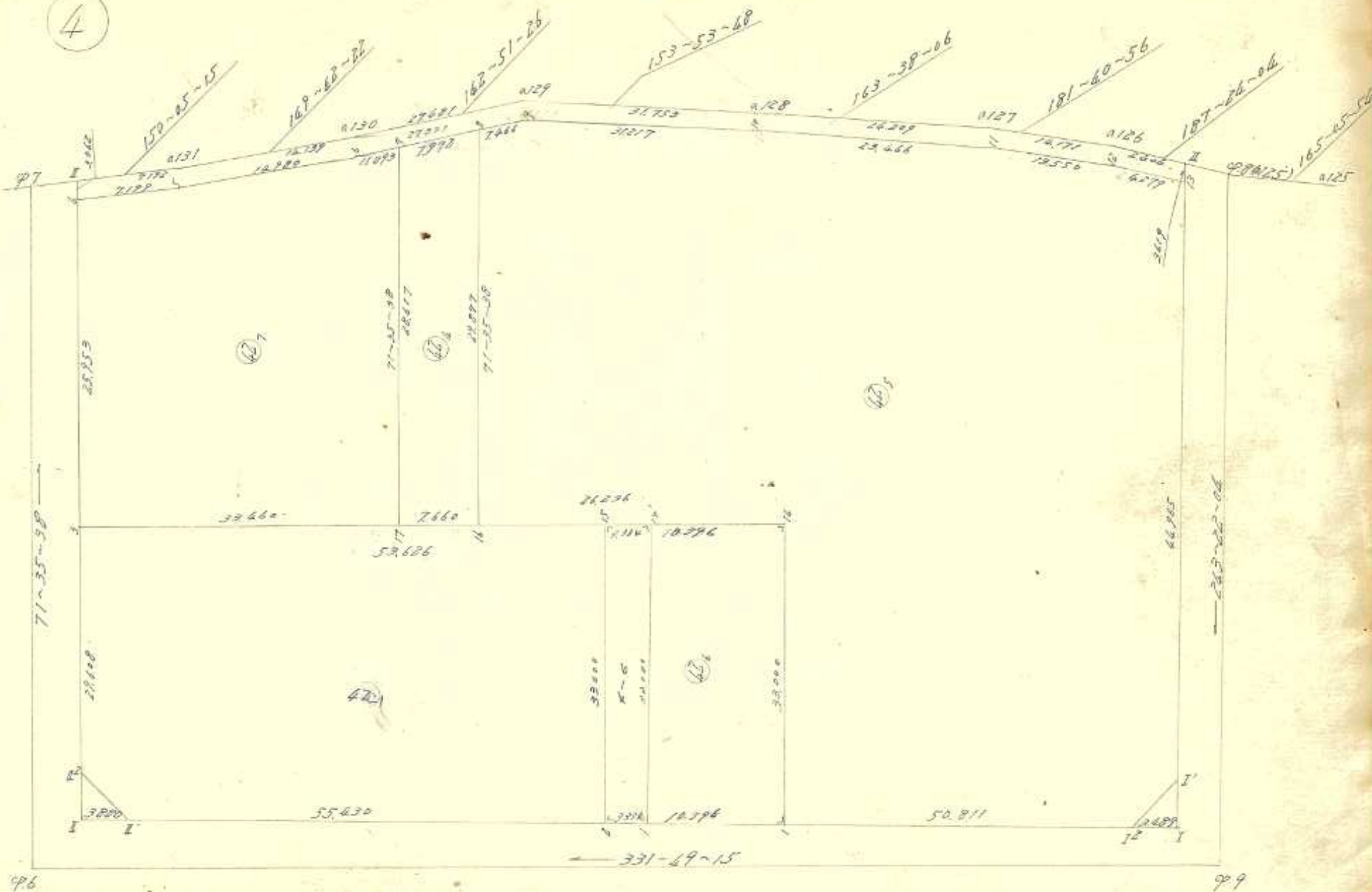
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0 \\ \Delta X \times \textcircled{2} &= + 116101.16108 \\ F &= 116101.16108 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 116101.16108$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \\ X_2 &= - 6161710.16146 \\ X &= - 6161710.16146 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \\ Y_2 &= - 6161710.16146 \\ Y &= - 6161710.16146 \end{aligned}$$

4



各筆面積計算集計表

7-77 番号	各筆確定				備考	各筆確定				備考
	各筆 番号	面		積		各筆 番号	面		積	
		m ²					坪	m ²			坪
4	⑤	3760	772	1198	13					
	⑦	883	245	287	21					
	④	220	777	66	70					
	⑥	342	610	103	78					
	⑧	4856	889	581	47					
	⑩	364	922	110	39	720.74107				
	4-6	110	610	33	88					
計										
					m ²		坪			
					ブロック計算 =	7374.108	ブロック計算 =	2230.67		
					各筆集計 =	7374.07	各筆集計 =	2230.65	(
					ε =	0.037	ε =	0.02		

協和建設測量

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)					
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-				
4	筆番号	99 ¹²	6416.978	-	0	4620	3850.756	-	+	28.760	488.287	.	.	2350.054	
	62 ₅	1	6461.767	-	0	6037	3876.763	-	0	5.096	.	.	314.765	7615.736	
		16	6477.350	-	0	3870	3855.850	-	0	16.699	.	.	1291.668	2161.975	
		16	6500.476	-	0	3256	3843.462	-	0	15.959	.	.	1603.496	1415.183	
		8	6509.910	-	0	3482	3871.811	-	0	32.857	.	.	3611.313	250.046	
		9	6503.958	-	+	3298	3876.319	-	0	18.243	.	.	1896.306	2593.701	
		10	6475.925	-	+	6054	3890.054	-	0	20.346	.	.	1566.770	4552.050	
		11	6453.410	-	+	3606	3896.665	-	0	6.214	.	.	331.890	3485.740	
		12	6439.865	-	+	1778	3896.868	-	+	1.942	37.792	.	.	1712.415	.

控除シタル値

X = 於テ

y = 於テ

$\Sigma =$

2S =

S =

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (8)		(3) × (4)				
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-			
	筆番号	13	6435.682	-	+	2439	3895.717	-	+	46.745	1451.418	.	.	2335.399
		99 ¹¹	6415.466	-	+	1864	3855.523	-	+	44.961	695.367	.	.	1635.171
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-
			.	-	-	.	.	-

控除シタル値

X = 於テ 6400

y = 於テ 3800

$\Sigma =$

2S =

S =

年 月 日

面積計算用紙

街那番号 4	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₇	17	6507.228	-	20.459	3839.845	-	+42.953	310.664			815.189
	3	6536.723	-	37.690	3824.045	-	98.825		324.080		906.256
	4	6544.918	-	1.955	3848.670	-	28.215		1267.367		95.150
	5	6538.678	-	+19.174	3852.260	-	11.746		431.105	1002.033	
	6	6525.744	-	+22.414	3859.816	-	14.738		379.415	1340.716	
	7	6516.264	-	+10.518	3866.998	-	19.771	324.808		1140.535	

控除シタル値

X = 於テ 6500

y = 於テ 3800

$$\bar{X} = \frac{835.272}{28} = 29.83114$$

$$2S = \frac{1716.689}{28} = 61.31032$$

$$S = \frac{883.345}{267219} \text{ 年 月 日}$$

面積計算用紙

街那番号 4	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₄	16	6500.476	-	+2.682	3843.462	-	+31.966	75.216		118.565	
	17	6547.288	-	15.788	3839.845	-	23.536		170.118		829.073
	7	6516.264	-	2.682	3866.998	-	31.966		519.895		179.689
	8	6509.910	-	+15.788	3871.811	-	23.536	239.242		1133.752	

控除シタル値

X = 於テ 6500

y = 於テ 3800

$$\bar{X} = \frac{249.458}{28} = 8.90921$$

$$2S = \frac{427.555}{28} = 15.26982$$

$$S = \frac{220.777}{66789} \text{ 年 月 日}$$

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
4-6	1	6661.767	-	76.419	3866.763	-	739.998	600.256			23.418
	1	6670.921	-	76.767	3861.856	-	76.180		506.112		45.881
	14	6686.516	-	6.419	3850.963	-	39.998		1261.603		198.683
	14	6677.350	-	76.767	3855.858	-	76.180	661.323			287.279

控除シタル値

X = 於テ 6.670
 Y = 於テ 2720

Σ = 1061.377 1767.515 790.647 766.506
 2S = 686.138 686.137
 S = 343.068

192.75 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
4-6	1	6670.921	-	18.666	3861.856	-	730.663	29.567			13.468
	5	6679.870	-	18.522	3850.180	-	587.515		106.423		5.186
	15	6689.653	-	18.666	3869.369	-	930.663		196.487		371.368
	14	6686.516	-	18.522	3850.963	-	787.515	456.323			573.186

控除シタル値

X = 於テ 6.670
 Y = 於テ 2720

Σ = 687.930 708.970 596.568 376.588
 2S = 343.965 350.284
 S = 171.982

23.28 年 月 日

面積計算用紙

変更 印刷

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
4 筆番号 ④	1	6461.767	-	+ 3.480	3826.763	-	+ 135.572	418.576	,	93.135	,
	2	6473.870	-	0 27.686	3820.280	-	0 22.606	,	539.605	,	561.472
	15	6489.453	-	0 3.480	3849.369	-	0 35.572	,	1403.622	,	171.806
	14	6477.350	-	+ 27.686	3855.852	-	+ 22.606	618.274	,	1546.318	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,

控除シタル値

X = 於テ 6450

y = 於テ 3800

$$\Sigma = \frac{1436.850}{28} = 51.316$$

$$2S = \frac{1943.027}{28} = 69.394$$

$$S = \frac{1639.453}{28} = 58.552$$

$$\Sigma = \frac{733.276}{28} = 26.188$$

$$S = \frac{452.089}{28} = 16.146$$

$$137.067$$

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ④	2	6473.870	-	0 32.276	3820.280	-	+ 55.267	1319.283	,	1407.597	,
	96 ^Ⅱ	6522.729	-	0 53.504	3796.102	-	+ 24.328	1769.351	,	219.473	,
	96 ^Ⅱ	6527.374	-	0 13.996	3795.952	-	0 29.963	,	2316.810	,	83.292
	3	6536.723	-	+ 37.921	3824.045	-	0 53.417	,	4632.482	1291.020	,
	15	6489.453	-	+ 62.853	3849.369	-	+ 3.765	148.541	,	3731.580	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,
		-	-	,	,	-	,	,	,	,	,

控除シタル値

X = 於テ 6450

y = 於テ 3720

$$\Sigma = \frac{3237.115}{28} = 115.611$$

$$2S = \frac{6949.292}{28} = 248.189$$

$$S = \frac{3712.178}{28} = 132.599$$

$$\Sigma = \frac{5082.540}{28} = 181.519$$

$$S = \frac{1856.089}{28} = 66.290$$

$$561.677$$

年 月 日

面積計算用紙

街区番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
4 筆番号 ④	13	6435.628	-	② 2.620	3895.717	-	+ 2.684	95.609			250.779
	12	6439.865	-	② 17.788	3896.268	-	② 1.948		37.993		1.712.415
	11	6453.410	-	② 36.060	3896.665	-	+ 6.214	331.890			3085.700
	10	6475.925	-	② 50.548	3890.054	-	+ 20.346	1546.770			4562.060
	9	6503.958	-	② 49.819	3876.319	-	+ 30.238	3143.482			3802.136
	8	6525.744	-	② 34.720	3859.816	-	+ 24.059	3025.275			2076.812
	5	6538.678	-	② 19.174	3852.260	-	+ 11.146	1545.765			1002.033
	4	6544.918	-	② 7.206	3848.670	-	+ 1.685	99.269			350.716
	97 ²	6545.884	-	+ 5.268	3851.575	-	② 6.491		946.933	271.697	

控除シタル値

X=於テ

y=於テ

$\bar{x} =$

$2S =$

S=

年 月 日

面積計算用紙

街区番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	0131	6539.650	-	+ 18.442	3855.161	-	② 10.718		1496.769	1017.279	
	0130	6527.462	-	+ 34.174	3862.293	-	② 23.725		3023.561	2125.063	
	0129	6505.536	-	+ 50.420	3878.886	-	② 30.564		3225.602	3977.432	
	0128	6477.028	-	+ 51.742	3892.857	-	② 20.792		1601.441	4802.607	
	0127	6453.794	-	+ 37.393	3899.678	-	② 6.605		344.551	3727.259	
	0126	6439.629	-	+ 16.549	3899.262	-	+ 1.726	28.771		1602.687	
	48(anc)	6427.245	-	+ 4.007	3898.950	-	+ 3.545	132.034		296.501	

控除シタル値

X=於テ 6400

y=於テ 3800

$\bar{x} = 9946.805$ $10,676.649$ 17962.525 $17,232.681$

$2S =$

729.844

729.844

S=

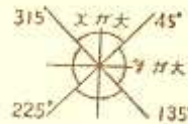
364.922

110.39坪

年 月 日

多角点計算用紙

測量No. _____



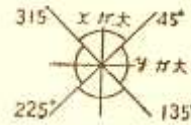
象	I	+	+	+
	II	-	+	-
限	III	-	-	-
	IV	+	-	-

測点	視点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	99 ¹	112.971		331 49 15	3.489							6413.902	3852.404	99 ¹
99 ¹	99 ²											6416.978	3850.756	99 ²
99 ²	1				50.811							6461.767	3826.763	1
1	2				10.996							6470.931	3821.854	1
2	96 ¹				3.334							6473.870	3820.280	2
96 ¹	96 ²				55.430							6522.729	3794.108	96 ¹
96 ²	96 ³				3.800							6526.149	3792.270	96 ²
96 ³	96 ⁴			71 35 38	3.880							6527.374	3795.952	96 ³
96 ⁴	3				29.608							6536.723	3804.045	3
3	4	58.623			25.953							6544.918	3848.670	4
4	97 ¹				3.062							6545.884	3851.575	97 ¹
97 ¹	9131			150 05 15	7.192							6539.650	3855.161	9131
9131	9130			149 42 22	14.139							6527.442	3862.293	9130
9130	9129			142 51 26	27.481							6505.536	3878.886	9129
9129	9128			153 53 48	31.753							6477.022	3892.857	9128
9128	9127			163 38 06	26.209							6453.794	3899.678	9127
9127	9126			181 40 56	14.171							6439.627	3899.262	9126
9126	98 ¹			187 26 04	2.404							6437.245	3898.952	98 ¹
98 ¹	13	48.584		243 22 04	3.619							6435.622	3895.717	13
13	99 ¹				46.965							6415.466	3855.523	99 ¹
99 ¹	99 ²				3.489							6413.902	3852.404	99 ²

協和建

多角点計算用紙

測量No.



象 限	I	+	/	+	/
	II	-	/	+	/
	III	-	\	-	\
	IV	+	\	-	\

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	a130											6527.442	3862.298	a130
a130	a130'			329 42 22	5.000	506466	863466	4.317			2.522	6531.759	3859.776	a130'
a130'	a130''			239 42 22	3.000				1.513		2.590	6530.246	3857.186	a130''
	a129											6505.536	3878.886	a129
a129	a129'			322 51 26	10.000	603788	797145	7.971			6.038	6513.507	3872.848	a129'
a129'	a129''			232 51 26	3.000				1.811		2.391	6511.696	3870.457	a129''
	a128											6477.022	3892.857	a128
a128	a128'			333 53 48	10.000	439983	898006	8.980			4.400	6486.002	3888.457	a128'
a128'	a128''			243 53 48	3.000				1.320		2.694	6484.682	3885.763	a128''
	a127											6453.794	3899.678	a127
a127	a127'			343 38 06	10.000	281737	959498	9.595			2.817	6463.389	3896.241	a127'
a127'	a127''			253 38 06	3.000				.845		2.878	6462.564	3893.983	a127''
	a126											6439.629	3899.262	a126
a126	a126'			1 40 56	5.000	029375	999568	4.998		.147		6446.627	3899.409	a126'
a126'	a126''			271 40 56	3.000			.088			2.999	6446.715	3896.410	a126''
	98(125)											6433.655	3898.486	98(125)
98(125)	A			277 24 06	3.000	128796	991671	.386			2.975	6434.041	3895.511	A
												6542.488	3850.068	a131'

協和建設測量

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
20											
筆番号	OP42 ^{IV}	1416.636		+36.863	3670.519			175.545	8811.267		6225.842
(町)	OP41 ^I	6394.435		+30.863	3596.783			178.555	6632.791		2987.014
	OP41 ^{II}	1385.773		08.011	3591.964			+9.558	819.918		736.724
	P4 ^{II}	6392.446		017.378	3587.225			+11.063	1022.730		1515.796
	P5 ^I	1403.151		021.923	3580.901			+11.687	1205.526		1773.593
	EC ^I	1414.369		016.082	3575.538			+7.432	849.990		1214.802
	OP36 ^{IV}	1419.233		09.510	3573.469			+7.221	26.350		698.690
	OP36 ^{III}	1423.879		040.012	3575.317			082.828		10260.650	3013.584
	OP35 ^{III}	1459.245		033.104	3556.297			085.439		13605.734	5174.056

控除シタル値

X = 於テ

Y = 於テ

Σ =

Σ =

S =

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	OP36 ^{IV}	1456.983		+6.692	3660.756			05.451		855.714	1075.779
	EC ^I	1452.553		+17.238	3661.748			04.426		675.200	2788.212
	P7 ^I	1439.745		+25.285	3665.182			07.923		1107.200	4176.627
	P6 ^I	1427.268		+18.447	3669.671			07.146		909.457	3129.921
	OP42 ^{IV}	1421.298		+10.632	3672.328			08.848		102.861	1832.191

控除シタル値

X = 於テ 1300

Y = 於テ 3500

Σ = 19368 472 27516 916 22275 586 14127 245

Σ = 8148.344

Σ = 8148.344

S = 4074.172

1,232.44

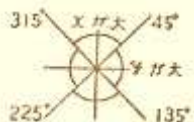
多角点計算用紙

測量No.



測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
		"		"								6418.056	3673.770	OP42
942 ^{IV}	942 ^{IV}			246 26 32	3.548	400216	916421					6416.636	3670.519	OP42
942 ^{IV}	941 ^I			"	80.460	"	"					6386.435	3596.783	OP41
941 ^I	941 ^I			"	3.222	"	"					6383.146	3593.830	OP41
941 ^I	941 ^I			324 37 02	3.222	579044	815296					6385.773	3591.964	OP41
941 ^I	P ₅			"	8.195	"	"					6392.446	3587.285	P4
P ₄	P ₅			329 25 42	12.433	508626	860989					6402.151	3589.901	P ₅
P ₅	EC'			334 26 58	12.434	431299	902209					6414.369	3575.538	EC'
EC'	936 ^{II}			336 57 32	5.285	391445	920201					6419.233	3573.469	OP36
936 ^{II}	936 ^{II}			"	3.519	"	"					6422.471	3572.092	OP36
936 ^{II}	936 ^{II}			66 24 32	3.519	400216	916421					6423.879	3575.317	OP36
936 ^{II}	935 ^{II}			"	88.366	"	"					6459.245	3656.297	OP35
935 ^{II}	935 ^{II}			"	3.929	"	"					6460.817	3659.898	OP35
935 ^{II}	935 ^{II}			187 23 00	3.929	218427	975853					6456.983	3660.756	OP35
935 ^{II}	EC'			"	4.540	"	"					6452.553	3661.748	EC'
EC'	P ₇			166 59 34	13.260	258960	965888					6439.745	3665.182	P ₇
P ₇	P ₆			160 12 50	13.260	338510	940963					6427.268	3669.671	P ₆
P ₆	942 ^{IV}			156 00 46	1.535	406515	913644					6421.298	3672.322	OP42
942 ^{IV}	942 ^{IV}			"	3.548	"	"					6418.056	3673.770	OP42

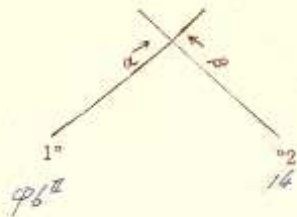
協和建築測量



象 限	I	+	/	+	/
	II	/	-	+	/
	III	/	-	-	/
	IV	+	/	-	-

点	測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
							Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
		99 ¹	° 1 "		° 1 "	.			.	.	.	6413.902	3852.604	99 ¹
	99 ¹	1			331 49 15	54.300	472209	881487	47.865	.	25.841	6461.767	3826.763	1	
	1	14			61 49 15	33.000	"	"	15.583	.	29.089	6477.350	3855.852	14	
		3			.	.			.	.	.	6536.723	3876.045	3
	3	17			151 49 15	33.460	472209	881487	29.495	15.800	.	6507.228	3839.845	17	
	17	16			"	7.660	"	"	6.752	3.617	.	6500.476	3843.462	16	
		1			.	.			.	.	.	6461.767	3826.763	1
	1	2			331 49 15	13.730	472209	881487	18.103	.	6.483	6473.870	3820.280	2	
	2	15			61 49 15	33.000	"	"	15.583	.	29.089	6482.453	3849.369	15	
	15	16 ¹			151 49 15	9.394	"	"	6.939	1.574	.	6486.514	3854.743	16 ¹	
	16 ¹	1 ¹			291 49 15	33.000	"	"	15.583	.	29.089	6470.901	3851.856	1 ¹	

算出點 3



$$\begin{aligned} \frac{14}{96''} X_2 &= - \frac{614771.1350}{96''} \\ \frac{14}{96''} X_1 &= - \frac{615261.1149}{96''} \\ \Delta X &= -0.14181799 \end{aligned}$$

$$\alpha = 171^\circ - 54' - 13''$$

$$\beta = 139^\circ - 48' - 15''$$

$$\beta - \alpha = 280^\circ - 4' - 22''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + \frac{11516.045994}{96''} \\ \Delta X \times \textcircled{4} &= + \frac{11391.044335}{96''} \\ E &= \frac{11516.045994}{96''} \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = \frac{11391.044335}{96''}$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + \frac{11110.15174}{96''} \\ X_1 &= - \frac{615261.1149}{96''} (+) \\ X &= - \frac{615261.1149}{96''} \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \frac{11110.15174}{96''} \\ Y_1 &= - \frac{317921.12170}{96''} (+) \\ Y &= - \frac{317921.12170}{96''} \end{aligned}$$

$$\begin{aligned} Y_2 &= - \frac{318151.1852}{96''} \\ Y_1 &= - \frac{317921.12170}{96''} \\ \Delta Y &= -0.16191582 \end{aligned}$$

$$\cos \alpha = + \frac{0.1311171510}{96''} \textcircled{1}$$

$$\sin \alpha = + \frac{0.1941818428}{96''} \textcircled{2}$$

$$\cos \beta = + \frac{0.1818114751}{96''} \textcircled{3}$$

$$\sin \beta = - \frac{0.1417777101}{96''} \textcircled{4}$$

$$\sin(\beta - \alpha) = - \frac{0.1918154181}{96''} \textcircled{5}$$

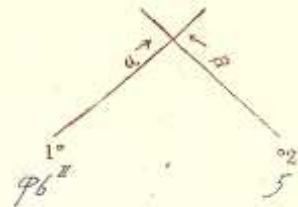
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + \frac{11210.107802}{96''} \\ \Delta X \times \textcircled{2} &= + \frac{11210.107802}{96''} \\ F &= \frac{11210.107802}{96''} \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = \frac{11210.107802}{96''}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \frac{11110.15174}{96''} \\ X_2 &= - \frac{614771.1350}{96''} (+) \\ X &= - \frac{614771.1350}{96''} \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - \frac{11110.15174}{96''} \\ Y_2 &= - \frac{318151.1852}{96''} (+) \\ Y &= - \frac{318151.1852}{96''} \end{aligned}$$

算出點 4



$$\begin{aligned} \frac{5}{96''} X_2 &= - \frac{615131.16178}{96''} \\ \frac{5}{96''} X_1 &= - \frac{615261.1149}{96''} \\ \Delta X &= -0.1112115219 \end{aligned}$$

$$\alpha = 171^\circ - 13' - 13''$$

$$\beta = 139^\circ - 05' - 15''$$

$$\beta - \alpha = 251^\circ - 08' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{4} &= + \frac{11110.199911}{96''} \\ \Delta X \times \textcircled{3} &= + \frac{11110.199911}{96''} \\ E &= \frac{11110.199911}{96''} \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{6}} = \frac{11110.199911}{96''}$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + \frac{11110.199911}{96''} \\ X_1 &= - \frac{615261.1149}{96''} (+) \\ X &= - \frac{615261.1149}{96''} \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \frac{11110.199911}{96''} \\ Y_1 &= - \frac{317921.12170}{96''} (+) \\ Y &= - \frac{317921.12170}{96''} \end{aligned}$$

$$\begin{aligned} Y_2 &= - \frac{318151.1852}{96''} \\ Y_1 &= - \frac{317921.12170}{96''} \\ \Delta Y &= +0.1519191910 \end{aligned}$$

$$\cos \alpha = + \frac{0.1311171510}{96''} \textcircled{1}$$

$$\sin \alpha = + \frac{0.1941818428}{96''} \textcircled{2}$$

$$\cos \beta = + \frac{0.1818114751}{96''} \textcircled{3}$$

$$\sin \beta = - \frac{0.1417777101}{96''} \textcircled{4}$$

$$\sin(\beta - \alpha) = - \frac{0.1918154181}{96''} \textcircled{5}$$

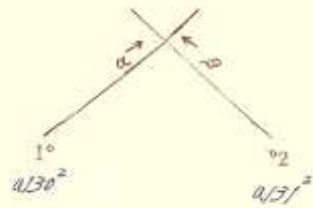
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + \frac{11110.199911}{96''} \\ \Delta X \times \textcircled{2} &= + \frac{11110.199911}{96''} \\ F &= \frac{11110.199911}{96''} \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = \frac{11110.199911}{96''}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \frac{11110.199911}{96''} \\ X_2 &= - \frac{615131.16178}{96''} (+) \\ X &= - \frac{615131.16178}{96''} \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - \frac{11110.199911}{96''} \\ Y_2 &= - \frac{318151.1852}{96''} (+) \\ Y &= - \frac{318151.1852}{96''} \end{aligned}$$

算出点 5



$$\begin{aligned} \frac{1}{231^\circ} X_2 &= -654210.14888 \\ \frac{1}{230^\circ} X_1 &= -654310.12416 \\ \Delta X &= -11169.8442 \end{aligned}$$

$$\alpha = 1329^\circ - 42' - 48''$$

$$\beta = 1200^\circ - 45' - 45''$$

$$\beta - \alpha = 11^\circ - 42' - 43''$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1116.174980 \\ \Delta X \times \text{④} &= +1116.174980 \\ E &= 1116.174980 \end{aligned}$$

$$S_1 = \frac{|E|}{\text{⑤}} = 1191.171516$$

$$\begin{aligned} S_1 \times \text{①} &= +1116.174980 \\ X_1 &= -654310.12416 \\ X &= -654310.12416 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= -318157.11816 \\ Y_1 &= -318157.11816 \\ Y &= -318157.11816 \end{aligned}$$

$$\begin{aligned} Y_2 &= -318157.11816 \\ Y_1 &= -318157.11816 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +0.181134447 \text{ ①} \\ \text{Sin} \alpha &= -0.181134447 \text{ ②} \\ \text{Cos} \beta &= -0.181134447 \text{ ③} \\ \text{Sin} \beta &= +0.181134447 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -0.181134447 \text{ ⑤} \end{aligned}$$

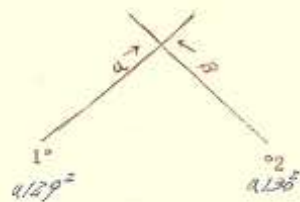
$$\begin{aligned} \Delta Y \times \text{①} &= -0.181134447 \\ \Delta X \times \text{②} &= -0.181134447 \\ F &= -0.181134447 \end{aligned}$$

$$S_2 = \frac{|F|}{\text{⑥}} = 1116.174980$$

$$\begin{aligned} S_2 \times \text{③} &= -0.181134447 \\ X_2 &= -654310.12416 \\ X &= -654310.12416 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= +0.181134447 \\ Y_2 &= -318157.11816 \\ Y &= -318157.11816 \end{aligned}$$

算出点 6



$$\begin{aligned} \frac{1}{230^\circ} X_2 &= -654310.12416 \\ \frac{1}{229^\circ} X_1 &= -654111.16196 \\ \Delta X &= -111781.15510 \end{aligned}$$

$$\alpha = 1329^\circ - 42' - 48''$$

$$\beta = 1269^\circ - 42' - 48''$$

$$\beta - \alpha = 11^\circ - 42' - 48''$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1117.15510 \\ \Delta X \times \text{④} &= +1117.15510 \\ E &= 1117.15510 \end{aligned}$$

$$S_1 = \frac{|E|}{\text{⑤}} = 1117.15510$$

$$\begin{aligned} S_1 \times \text{①} &= +1117.15510 \\ X_1 &= -654111.16196 \\ X &= -654111.16196 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= -318157.11816 \\ Y_1 &= -318157.11816 \\ Y &= -318157.11816 \end{aligned}$$

$$\begin{aligned} Y_2 &= -318157.11816 \\ Y_1 &= -318157.11816 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +0.181134447 \text{ ①} \\ \text{Sin} \alpha &= -0.181134447 \text{ ②} \\ \text{Cos} \beta &= -0.181134447 \text{ ③} \\ \text{Sin} \beta &= +0.181134447 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -0.181134447 \text{ ⑤} \end{aligned}$$

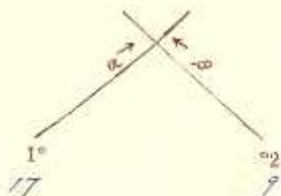
$$\begin{aligned} \Delta Y \times \text{①} &= -0.181134447 \\ \Delta X \times \text{②} &= -0.181134447 \\ F &= -0.181134447 \end{aligned}$$

$$S_2 = \frac{|F|}{\text{⑥}} = 1117.15510$$

$$\begin{aligned} S_2 \times \text{③} &= -0.181134447 \\ X_2 &= -654310.12416 \\ X &= -654310.12416 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= +0.181134447 \\ Y_2 &= -318157.11816 \\ Y &= -318157.11816 \end{aligned}$$

算出点 7



$$\begin{aligned} P \quad X_2 &= -615101.19158 \\ 17 \quad X_1 &= -615101.19158 \\ \Delta X &= 0 \end{aligned}$$

$$\alpha = 172^\circ - 21' - 13''$$

$$\beta = 226^\circ - 52' - 12''$$

$$\beta - \alpha = 254' - 31' - 45''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +11219.167463 \\ \Delta X \times \textcircled{4} &= +1111.1916146 \\ E &= 11219.167463 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 11219.167463$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 11119.1614316 \\ X_1 &= - 615101.19158 \\ X &= - 615101.19158 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + 11219.167463 \\ Y_1 &= - 318176.13119 \\ Y &= - 318176.13119 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 318176.13119 \\ Y_1 &= - 318176.13119 \\ \Delta Y &= 0 \end{aligned}$$

$$\text{Cos} \alpha = + 0.171191171191 \textcircled{1}$$

$$\text{Sin} \alpha = + 0.985288442 \textcircled{2}$$

$$\text{Cos} \beta = + 0.171191171191 \textcircled{3}$$

$$\text{sin} \beta = 0.985288442 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - 0.171191171191 \textcircled{5}$$

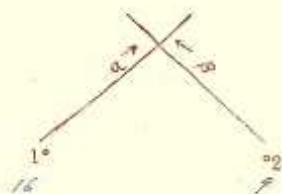
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 11119.1614316 \\ \Delta X \times \textcircled{2} &= 0 \\ F &= 11119.1614316 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 11119.1614316$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + 11119.1614316 \\ X_2 &= - 615101.19158 \\ X &= - 615101.19158 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \\ Y_2 &= - 318176.13119 \\ Y &= - 318176.13119 \end{aligned}$$

算出点 8



$$\begin{aligned} P \quad X_2 &= -615101.19158 \\ 16 \quad X_1 &= -615101.19158 \\ \Delta X &= 0 \end{aligned}$$

$$\alpha = 171^\circ - 21' - 13''$$

$$\beta = 225^\circ - 52' - 12''$$

$$\beta - \alpha = 254' - 31' - 45''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +11219.167463 \\ \Delta X \times \textcircled{4} &= 0 \\ E &= 11219.167463 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 11219.167463$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 11119.1614316 \\ X_1 &= - 615101.19158 \\ X &= - 615101.19158 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + 11219.167463 \\ Y_1 &= - 318176.13119 \\ Y &= - 318176.13119 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 318176.13119 \\ Y_1 &= - 318176.13119 \\ \Delta Y &= 0 \end{aligned}$$

$$\text{Cos} \alpha = + 0.171191171191 \textcircled{1}$$

$$\text{Sin} \alpha = + 0.985288442 \textcircled{2}$$

$$\text{Cos} \beta = + 0.171191171191 \textcircled{3}$$

$$\text{sin} \beta = 0.985288442 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - 0.171191171191 \textcircled{5}$$

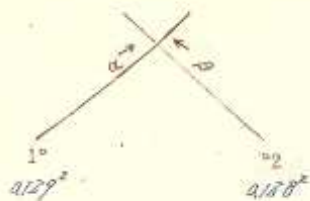
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 11119.1614316 \\ \Delta X \times \textcircled{2} &= + 1111.1916146 \\ F &= 11119.1614316 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 11119.1614316$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + 11119.1614316 \\ X_2 &= - 615101.19158 \\ X &= - 615101.19158 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \\ Y_2 &= - 318176.13119 \\ Y &= - 318176.13119 \end{aligned}$$

算出点 9



$$\begin{aligned} 0129^\circ X_2 &= -646841 \cdot 1682 \\ 0129^\circ X_1 &= -645111 \cdot 1686 \\ \Delta X &= -01277 \cdot 0144 \end{aligned}$$

$$\alpha = 142'' - 51' - 86''$$

$$\beta = 1233'' - 53' - 48''$$

$$\beta - \alpha = 191'' - 02' - 62''$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1117 \cdot 17318 \\ \Delta X \times \text{④} &= +1171 \cdot 18892 \\ E &= 1117 \cdot 185890 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 119 \cdot 170170$$

$$\begin{aligned} S_1 \times \text{①} &= 9 \frac{1117 \cdot 17318}{X_1 = -645111 \cdot 1686 (+)} \\ X &= -645013 \cdot 1958 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= + \frac{1117 \cdot 18162}{Y_1 = -381710 \cdot 1457 (+)} \\ Y &= -381761 \cdot 1319 \end{aligned}$$

$$\begin{aligned} Y_2 &= -381851 \cdot 1713 \\ Y_1 &= -381710 \cdot 1457 (-) \\ \Delta Y &= +1117 \cdot 1906 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0 \cdot 179171133 \text{ ①} \\ \text{Sin} \alpha &= + \cdot 16032802 \text{ ②} \\ \text{Cos} \beta &= + \cdot 181981092 \text{ ③} \\ \text{sin} \beta &= 0 \cdot 143919911 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= - \cdot 11914815 \text{ ⑤} \end{aligned}$$

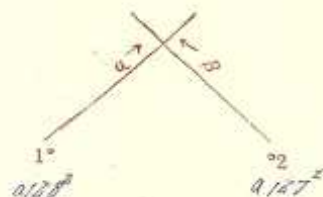
$$\begin{aligned} \Delta Y \times \text{①} &= 01128 \cdot 121092 \\ \Delta X \times \text{②} &= 01126 \cdot 131113 (-) \\ F &= 1121 \cdot 11051 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑥}} = 1211 \cdot 146419$$

$$\begin{aligned} S_2 \times \text{③} &= + \frac{11191 \cdot 1216}{X_2 = -646841 \cdot 1682 (+)} \\ X &= -645013 \cdot 1958 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 9 \frac{11191 \cdot 1414}{Y_2 = -381851 \cdot 1713 (+)} \\ Y &= -381761 \cdot 1319 \end{aligned}$$

算出点 10



$$\begin{aligned} 0128^\circ X_2 &= -646841 \cdot 1544 \\ 0128^\circ X_1 &= -646841 \cdot 1686 (-) \\ \Delta X &= -01277 \cdot 1138 \end{aligned}$$

$$\alpha = 1253'' - 53' - 48''$$

$$\beta = 1243'' - 58' - 08''$$

$$\beta - \alpha = 1899'' - 44' - 18''$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1117 \cdot 188617 \\ \Delta X \times \text{④} &= +1161 \cdot 131749 (-) \\ E &= 1117 \cdot 181948 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 119 \cdot 175116$$

$$\begin{aligned} S_1 \times \text{①} &= 9 \frac{1117 \cdot 17517}{X_1 = -646841 \cdot 1682 (+)} \\ X &= -646171 \cdot 1965 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= + \frac{1117 \cdot 1219}{Y_1 = -381851 \cdot 1713 (+)} \\ Y &= -381901 \cdot 1054 \end{aligned}$$

$$\begin{aligned} Y_2 &= -381931 \cdot 1913 \\ Y_1 &= -381851 \cdot 1713 (-) \\ \Delta Y &= -1181 \cdot 2210 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0 \cdot 181910162 \text{ ①} \\ \text{Sin} \alpha &= + \cdot 143919911 \text{ ②} \\ \text{Cos} \beta &= + \cdot 195911916 \text{ ③} \\ \text{sin} \beta &= 0 \cdot 121817169 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= - \cdot 116911491 \text{ ⑤} \end{aligned}$$

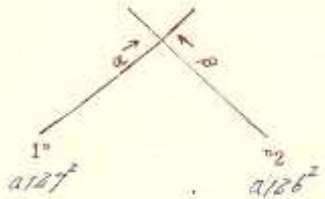
$$\begin{aligned} \Delta Y \times \text{①} &= 91117 \cdot 131158 \\ \Delta X \times \text{②} &= 9119 \cdot 174658 (-) \\ F &= 1121 \cdot 135894 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑥}} = 119 \cdot 19659$$

$$\begin{aligned} S_2 \times \text{③} &= + \frac{11191 \cdot 13181}{X_2 = -646841 \cdot 1682 (+)} \\ X &= -646171 \cdot 1965 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 9 \frac{11191 \cdot 19129}{Y_2 = -381931 \cdot 1913 (+)} \\ Y &= -381901 \cdot 1054 \end{aligned}$$

算出点 11



$$\begin{aligned} a126^\circ X_2 &= -646661.17115 \\ a127^\circ X_1 &= -646621.54616 \\ \Delta X &= -1171.6929 \end{aligned}$$

$$\alpha = 127^\circ - 126^\circ - 0^\circ$$

$$\beta = 127^\circ - 126^\circ - 156^\circ$$

$$\beta - \alpha = 127^\circ - 126^\circ - 156^\circ$$

$$\begin{aligned} \Delta Y \times \text{③} &= -1171.6929 \\ \Delta X \times \text{④} &= -1171.6929 \\ E &= 1171.6929 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1191.52101$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -646621.54616 \\ X &= -646621.54616 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - \\ Y_1 &= -389961.19813 \\ Y &= -389961.19813 \end{aligned}$$

$$\begin{aligned} Y_2 &= -389961.14110 \\ Y_1 &= -389961.19813 \\ \Delta Y &= -1171.6929 \end{aligned}$$

$$\begin{aligned} \text{Cosa} &= 0.1959488 \text{ ①} \\ \text{Sina} &= +.1271744 \text{ ②} \\ \text{Cos}\beta &= +.1999569 \text{ ③} \\ \text{sin}\beta &= +.10219156 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.13091821 \text{ ⑤} \end{aligned}$$

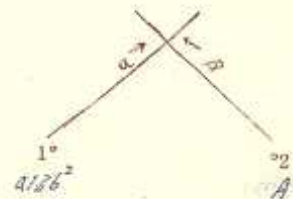
$$\begin{aligned} \Delta Y \times \text{①} &= -1171.6929 \\ \Delta X \times \text{②} &= -1171.6929 \\ F &= 1171.6929 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑥}} = 1189.619813$$

$$\begin{aligned} S_2 \times \text{③} &= + \\ X_2 &= -646661.17115 \\ X &= -646661.17115 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - \\ Y_2 &= -389961.14110 \\ Y &= -389961.14110 \end{aligned}$$

算出点 12



$$\begin{aligned} X_2 &= -646661.10161 \\ a126^\circ X_1 &= -646661.17115 \\ \Delta X &= -1171.6929 \end{aligned}$$

$$\alpha = 126^\circ - 126^\circ - 58^\circ$$

$$\beta = 126^\circ - 126^\circ - 106^\circ$$

$$\beta - \alpha = 126^\circ - 126^\circ - 106^\circ$$

$$\begin{aligned} \Delta Y \times \text{③} &= -1171.6929 \\ \Delta X \times \text{④} &= -1171.6929 \\ E &= 1171.6929 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1189.619813$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -646661.17115 \\ X &= -646661.17115 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - \\ Y_1 &= -389961.14110 \\ Y &= -389961.14110 \end{aligned}$$

$$\begin{aligned} Y_2 &= -389961.14110 \\ Y_1 &= -389961.14110 \\ \Delta Y &= -1171.6929 \end{aligned}$$

$$\begin{aligned} \text{Cosa} &= 0.1999569 \text{ ①} \\ \text{Sina} &= +.10219156 \text{ ②} \\ \text{Cos}\beta &= +.1999569 \text{ ③} \\ \text{sin}\beta &= +.10219156 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.13091821 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= -1171.6929 \\ \Delta X \times \text{②} &= -1171.6929 \\ F &= 1171.6929 \end{aligned}$$

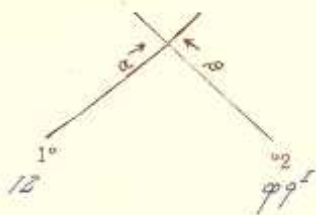
$$S_2 = \frac{F}{\text{⑥}} = 1189.619813$$

$$\begin{aligned} S_2 \times \text{③} &= + \\ X_2 &= -646661.10161 \\ X &= -646661.10161 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - \\ Y_2 &= -389961.14110 \\ Y &= -389961.14110 \end{aligned}$$

路線交叉点座標及距離計算用紙

算出点 13



$$\begin{aligned} 99^\circ X_2 &= - 6141131.19102 \\ 12 X_1 &= - 6141319.181615 \\ \Delta X &= 0 - 12151.91613 \end{aligned}$$

$$\begin{aligned} \alpha &= 107^\circ - 26' - 10'' \\ \beta &= 163^\circ - 28' - 04'' \\ \beta - \alpha &= 56^\circ - 02' - 54'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= 0.1119.16246 \\ \Delta X \times \text{①} &= 0.1123.120838 \\ E &= 1113.164582 \end{aligned}$$

$$S_1 = \frac{E}{\text{①}} = 1113.164582$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= - 6141319.181615 \\ X &= - 6141319.181615 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= - 3181915.17117 \\ Y &= - 3181915.17117 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 3181915.17117 \\ Y_1 &= - 3181915.17117 \\ \Delta Y &= 0 - 12151.91613 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.192116619 \text{ ①} \\ \text{Sin} \alpha &= 0.1123120838 \text{ ②} \\ \text{Cos} \beta &= + 0.111916246 \text{ ③} \\ \text{Sin} \beta &= + 0.1123120838 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= - 0.111916246 \text{ ⑤} \end{aligned}$$

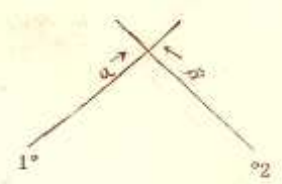
$$\begin{aligned} \Delta Y \times \text{①} &= - 1119.16246 \\ \Delta X \times \text{②} &= + 1123.120838 \\ F &= 1113.164582 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} = 1113.164582$$

$$\begin{aligned} S_2 \times \text{③} &= + \\ X_2 &= - 6141319.19102 \\ X &= - 6141319.19102 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= + \\ Y_2 &= - 3181915.17117 \\ Y &= - 3181915.17117 \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \\ X_1 &= - \\ \Delta X &= - \end{aligned}$$

$$\begin{aligned} \alpha &= \\ \beta &= \\ \beta - \alpha &= \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= - \\ \Delta X \times \text{④} &= - \\ E &= \end{aligned}$$

$$S_1 = \frac{E}{\text{③}} =$$

$$\begin{aligned} S_1 \times \text{①} &= - \\ X_1 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - \\ Y_1 &= - \\ Y &= - \end{aligned}$$

$$\begin{aligned} Y_2 &= - \\ Y_1 &= - \\ \Delta Y &= - \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= - \\ \text{Sin} \alpha &= - \\ \text{Cos} \beta &= - \\ \text{Sin} \beta &= - \\ \text{Sin}(\beta - \alpha) &= - \end{aligned}$$

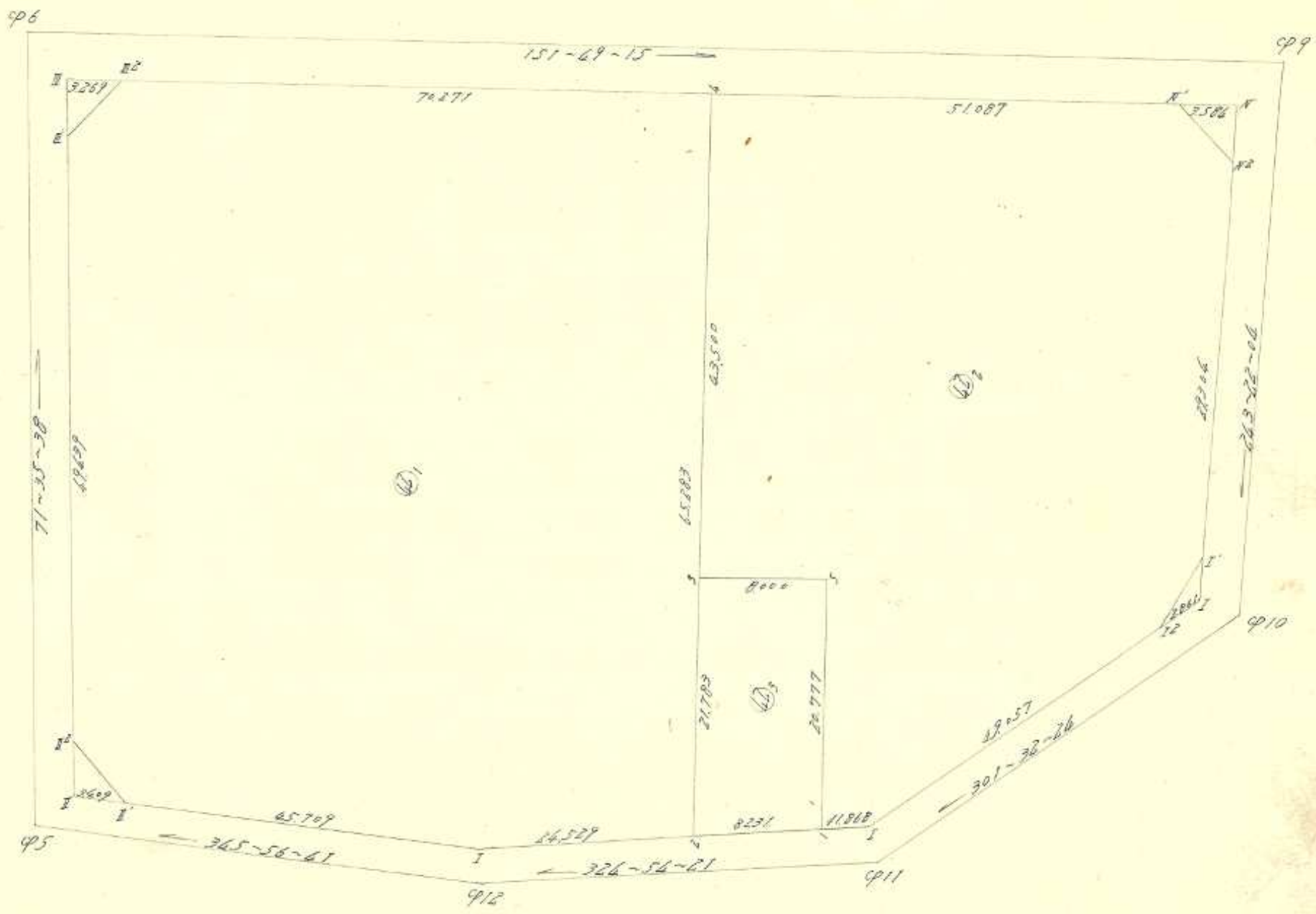
$$\begin{aligned} \Delta Y \times \text{①} &= - \\ \Delta X \times \text{②} &= - \\ F &= \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} =$$

$$\begin{aligned} S_2 \times \text{③} &= - \\ X_2 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - \\ Y_2 &= - \\ Y &= - \end{aligned}$$

(5)



面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ④	4 ²	6521.365	-	+63.792	3788.038	-	037.830		4590.481	5616.120	
	4	6459.603	-	+82.555	3821.222	-	+28.759	1708.371		10007.482	
	2	6438.790	-	+54.3	3759.279	-	+76.046	2949.826		32.188	
	4 ¹²	6458.860	-	066.411	3765.176	-	+25.203	1483.449			2909.831
	4 ⁵	6503.201	-	048.726	3736.076	-	+8.693	897.126			1660.319
	4 ⁵ ²	6507.586	-	019.994	3736.683	-	049.316		5305.613		729.661
	4 ⁶	6523.195	-	013.761	3783.392	-	051.555		6351.318		1167.557

控除シタル値

X = 於テ 6400

Y = 於テ 3700

$\bar{X} = 7038.770$ $\bar{Y} = 16267.412$ $\bar{X}^2 = 15655.790$ $\bar{Y}^2 = 6667.168$

$\Sigma X = 9208.662$

$\Sigma Y = 9208.662$

$S = 4606.321$

139281年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑤	4	6459.603	-	+31.297	3821.222	-	065.399		10426.797	3793.885	
	4 ⁹	6414.371	-	+49.798	3865.366	-	022.612		2586.157	7237.960	
	4 ⁴ ²	6409.605	-	+17.901	3863.836	-	+27.707	3036.826		2576.772	
	4 ¹⁰ ¹	6396.470	-	+12.921	3817.639	-	+31.190	3008.899		1520.014	
	4 ¹⁰ ²	6396.686	-	025.875	3818.646	-	+46.805	4525.295			2914.666
	4 ¹¹ ¹	6422.365	-	035.372	3770.836	-	+48.633	5950.006			2505.560
	1	6432.056	-	016.271	3766.011	-	012.891		1702.334		1061.523
	5	6438.616	-	013.612	3783.725	-	015.936		2208.985		1139.665
3	6445.668	-	020.787	3779.967	-	037.497		5662.113		1661.858	

控除シタル値

X = 於テ 6300

Y = 於テ 3700

$\bar{X} = 16521.024$ $\bar{Y} = 22384.386$ $\bar{X}^2 = 15126.611$ $\bar{Y}^2 = 9263.250$

$\Sigma X = 5863.362$

$\Sigma Y = 5863.361$

$S = 2931.681$

886.83年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ④	1	6.632' 056	-	0' 174	3764' 011	-	↑ 26' 446	783' 661			11' 138
	2	6.638' 790	-	0' 13' 612	3759' 279	-	○ 15' 936	618' 157		806' 906	
	3	6.645' 668	-	↑ 1' 174	3779' 967	-	○ 26' 446	1116' 600	13' 911		
	5	6.638' 616	-	↑ 13' 612	3783' 725	-	↑ 15' 936	615' 385	1139' 665		

控除シタル値

X = 於テ 6.600

y = 於テ 3.700

$\Sigma = 1399' 026$ $1736' 557$ $1153' 576$ $818' 044$

$\Sigma S = 335' 531$

$335' 532$

$S = 167' 766$

50.750坪

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ○			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				

控除シタル値

X = 於テ

y = 於テ

$M =$

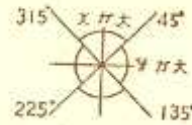
$\Sigma S =$

$S =$

年 月 日

多角点計算用紙

測量No.

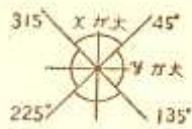


象	I	+	↘	+	↘
	II	-	↗	+	↗
限	III	-	↘	-	↘
	IV	+	↗	-	↗

測点	視点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	910 ^I	"		"	.			.	.	.	.	6395.187	3815.082	910 ^I
910 ^I	910 ^{II}			301 32 24	2.861			.	.	.	.	6396.686	3812.646	910 ^{II}
910 ^{II}	911 ^I			"	49.057			.	.	.	.	6422.365	3770.836	911 ^I
911 ^I	1			324 54 21	11.868			.	.	.	.	6432.056	3766.011	1
1	2	66 628		"	8.231			.	.	.	.	6438.790	3759.279	2
2	912 ^I			"	24.529			.	.	.	.	6458.860	3765.176	912 ^I
912 ^I	915 ^{II}			365 56 41	45.709			.	.	.	.	6502.201	3736.076	915 ^{II}
915 ^{II}	915 ^{III}			"	3.609			.	.	.	.	6506.508	3733.268	915 ^{III}
915 ^{III}	915 ^{III2}			71 25 38	3.609			.	.	.	.	6507.586	3736.483	915 ^{III2}
915 ^{III2}	916 ^{III}			"	49.639			.	.	.	.	6523.195	3782.392	916 ^{III}
916 ^{III}	916 ^{III}			"	3.269			.	.	.	.	6526.227	3786.496	916 ^{III}
916 ^{III}	916 ^{III2}			151 49 15	3.269			.	.	.	.	6521.365	3788.038	916 ^{III2}
916 ^{III2}	4	121 358		"	70.271			.	.	.	.	6459.603	3821.222	4
4	919 ^{IV}			"	51.087			.	.	.	.	6416.371	3865.366	919 ^{IV}
919 ^{IV}	919 ^{IV}			"	3.586			.	.	.	.	6411.212	3867.038	919 ^{IV}
919 ^{IV}	919 ^{IV2}			263 22 06	3.586			.	.	.	.	6409.605	3863.836	919 ^{IV2}
919 ^{IV2}	9110 ^{I'}			"	29.306			.	.	.	.	6396.670	3817.639	9110 ^{I'}
9110 ^{I'}	9110 ^I			"	2.861			.	.	.	.	6395.187	3815.082	9110 ^I

多角点計算用紙

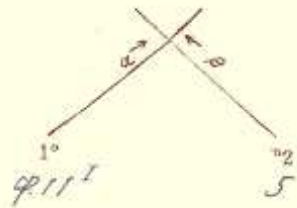
測量No. _____



象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	視点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
		° ' "		° ' "	
	φ6 ^{II}				.			.	.	.	.	6526.227	3706.696	φ6 ^{III}
φ6 ^{III}	4			151 49 15	73.560	472230	881675	64.826	34.728	.	.	6659.403	3821.222	4
6	3			251 35 38	63.500	315750	948862	13.735	41.275	.	.	6665.668	3779.967	3
3	5			151 49 15	8.000	472230	881675	7.052	3.778	.	.	6638.616	3783.725	5
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					
					

算出点	1
-----	---



$$\begin{aligned} 5 X_2 &= - 663181.16116 \\ 4911'' X_1 &= - 663221.13415 \\ \Delta X &= - 117161.61271 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 317831.17125 \\ Y_1 &= - 317701.18316 \\ \Delta Y &= - 117129.891 \end{aligned}$$

$$\alpha = 92.6^\circ - 54' - 12''$$

$$\cos \alpha = 7.1811821018 \quad \textcircled{1}$$

$$\beta = 22.1^\circ - 35' - 38''$$

$$\sin \alpha = 0.1571619222 \quad \textcircled{2}$$

$$\cos \beta = 9.1311517101 \quad \textcircled{3}$$

$$\sin \beta = 7.196888661 \quad \textcircled{4}$$

$$\beta - \alpha = 106^\circ - 41' - 17''$$

$$\sin(\beta - \alpha) = -0.195710921 \quad \textcircled{5}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 9.1161.6127039 \\ \Delta X \times \textcircled{4} &= 9.171.6127039 \\ E &= 1171.6127039 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= 7.17101.156752 \\ \Delta X \times \textcircled{2} &= 9.1191.195656 \\ F &= 1191.195656 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 1171.6127039$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 12101.171712$$

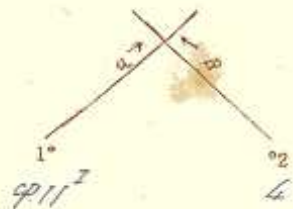
$$\begin{aligned} S_1 \times \textcircled{1} &= 7.1191.17117 \\ X_1 &= - 663221.13415 \\ X &= - 663221.10156 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 9.1161.151610 \\ X_2 &= - 663181.16116 \\ X &= - 663221.10156 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0.1161.1823 \\ Y_1 &= - 3171701.18316 \\ Y &= - 317641.10117 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 9.1171.17116 \\ Y_2 &= - 317831.17125 \\ Y &= - 317641.10117 \end{aligned}$$

算出点	2
-----	---



$$\begin{aligned} 4 X_2 &= - 66319.16013 \\ 4911'' X_1 &= - 663221.13415 \\ \Delta X &= - 11371.16518 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 318271.12723 \\ Y_1 &= - 3171701.18316 \\ \Delta Y &= - 115101.13188 \end{aligned}$$

$$\alpha = 138.2^\circ - 54' - 12''$$

$$\cos \alpha = 7.1111111111 \quad \textcircled{1}$$

$$\beta = 22.1^\circ - 35' - 38''$$

$$\sin \alpha = 0.1111111111 \quad \textcircled{2}$$

$$\cos \beta = 9.1311517101 \quad \textcircled{3}$$

$$\sin \beta = 7.196888661 \quad \textcircled{4}$$

$$\beta - \alpha = 146.1^\circ - 41' - 17''$$

$$\sin(\beta - \alpha) = -0.1111111111 \quad \textcircled{5}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 9.171.1910101 \\ \Delta X \times \textcircled{4} &= 9.137.162719 \\ E &= 1179.162719 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= 7.171.12786 \\ \Delta X \times \textcircled{2} &= 9.171.1315616 \\ F &= 1671.1315616 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 1261.619817$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 1671.1315616$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 7.1171.16125 \\ X_1 &= - 663221.13415 \\ X &= - 663221.17190 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 9.1171.16113 \\ X_2 &= - 66319.16013 \\ X &= - 663221.17190 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0.1171.17115 \\ Y_1 &= - 3171701.18316 \\ Y &= - 317519.12719 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 9.1161.19163 \\ Y_2 &= - 318271.12723 \\ Y &= - 317519.12719 \end{aligned}$$

6



7776
7377

各筆面積計算集計表

各筆 番号	各筆確定		備考	各筆 番号	各筆確定		備考
	面 m ²	積 坪			面 m ²	積 坪	
④ ₁	333	913	101 01	④	867	903	262 56
④ ₂	204	998	62 01	④ ₁	198	157	59 94
④ ₃	261	899	79 06	④ ₂	197	181	59 65
④ ₄	575	218	174 00	④ ₃	196	989	59 59
④ ₅	745	445	44 00				
④ ₆	142	184	43 01				
④ ₇	287	958	87 11				
④ ₈	572	791	173 27				
④ ₉	306	188	92 08				
④ ₁₀	254	502	76 99				
④ ₁₁	323	861	104 02				
④ ₁₂	320	886	97 07				
④ ₁₃	254	460	76 97				
④ ₁₄	327	890	99 19				
④ ₁₅	300	502	90 90				
④ ₁₆	392	464	118 72				
④ ₁₇	294	218	89 00				
④ ₁₈	125	629	38 00				
④ ₁₉	644	935	195 09	計			
④ ₂₀	294	265	89 01				
				m ²		坪	
				ブロック計算=	7249.649	ブロック計算=	2193.02
				各筆集計=	7249.483	各筆集計=	2192.975
				ε =	.166	ε =	.05

協和建設測量

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 ⑧	15 ⁷²	6481.902	-	+ 8.216	3728.617	-	+ 18.223	216.890	,	235.060	,
	26	6486.378	-	+ 11.316	3711.837	-	+ 21.018	132.756	,	,	133.947
	14	6503.218	-	+ 21.969	3707.605	-	+ 10.999	,	255.275	,	167.074
	95 ²¹	6508.287	-	+ 2.662	3722.836	-	+ 19.614	,	556.821	,	60.789
	95 ²²	6505.880	-	+ 13.755	3727.219	-	+ 7.224	,	186.957	374.397	,
	15 ⁷¹	6496.532	-	+ 13.978	3730.060	-	+ 1.398	,	20.316	420.179	,
	,	,	-	,	,	-	,	,	,	,	,

控除シタル値

X = 於テ 6480

Y = 於テ 3700

$\Sigma =$ 349.664 1017.469 1089.636 361.810

$\Sigma S =$ 667.885 667.826

S = 333.913
10/01/7 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 ⑨	26	6486.378	-	+ 20.626	3711.837	-	+ 6.965	44.005	,	650.410	,
	25	6482.592	-	+ 13.174	3700.640	-	+ 15.429	39.998	,	,	140.171
	13	6499.492	-	+ 20.626	3696.408	-	+ 6.965	,	135.760	,	132.171
	14	6503.218	-	+ 13.174	3707.605	-	+ 15.429	,	358.231	231.928	,
,	,	-	,	,	-	,	,	,	,	,	,
,	,	-	,	,	-	,	,	,	,	,	,
,	,	-	,	,	-	,	,	,	,	,	,
,	,	-	,	,	-	,	,	,	,	,	,
,	,	-	,	,	-	,	,	,	,	,	,

控除シタル値

X = 於テ 6480

Y = 於テ 3690

$\Sigma =$ 89.997 493.993 682.338 276.362

$\Sigma S =$ 409.996 409.996

S = 204.998
6/20/7 年 月 日

面積計算用紙

街路番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 ⑤	25	6482.592	-	+ 21.154	3700.640	-	+ 8.551	107.676		436.619	
	18 ^{1'}	6478.338	-	+ 2.780	3687.857	-	+ 15.397	128.380		21.842	
	12 ^{2'}	6479.812	-	9 12.029	3685.243	-	+ 5.233	51.366			68.311
	96 ^{1'}	6491.367	-	9 15.711	3682.626	-	+ .164	3.504			41.750
	96 ^{2'}	6495.723	-	9 8.125	3685.079	-	9 13.784		354.566		41.267
	12	6499.492	-	+ 13.131	3696.408	-	9 15.561		458.925	215.453	

控除シクル値
X=於テ 6470
y=於テ 3680

$\bar{x} = \frac{290.904}{25} = 11.63616$
 $\bar{y} = \frac{813.491}{25} = 32.53964$
 $S = \frac{261.293}{79.049}$
 年 月 日

面積計算用紙

街路番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 ⑤	17	6470.900	-	+ 25.608	3735.976	-	+ 26.122	284.730		921.273	
	28	6460.907	-	9 7.763	3705.965	-	+ 34.476	31.270			46.151
	26	6478.663	-	9 27.052	3701.500	-	9 23.492		438.431		40.578
	16 ^{1'}	6487.959	-	9 7.852	3729.437	-	9 30.567		854.623		231.139
	16 ^{2'}	6486.515	-	+ 17.059	3732.067	-	9 6.539		173.382	547.031	

控除シクル値
X=於テ 6460
y=於テ 3700

$\bar{x} = \frac{376.008}{25} = 15.04032$
 $\bar{y} = \frac{1466.436}{25} = 58.65744$
 $S = \frac{575.218}{174.007}$
 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	27	6469.571	-	+ 14.108	3703.776	-	+ 12.798	122.490	,	335.432	,
筆番号	10	6464.555	-	+ 2.168	3688.702	-	+ 16.703	76.082	,	,	18.866
④	11 ²¹	6471.739	-	+ 9.797	3687.073	-	+ .156	1.831	,	,	69.294
	11 ²²	6474.352	-	+ 6.924	3688.546	-	+ 14.427	,	207.056	,	59.173
	26	6478.663	-	+ 4.781	3701.500	-	+ 15.230	,	284.237	102.792	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,

控除シタル値

X = 於テ 6460

y = 於テ 3680

$$\bar{z} = \frac{200.403}{25} = \frac{491.293}{25} = \frac{438.224}{25} = \frac{147.333}{25}$$

$$2S = \frac{290.890}{25} = \frac{290.891}{25}$$

$$S = \frac{145.445}{25}$$

44.00¹⁹. 年 月 日 印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	28	6460.907	-	+ 12.700	3705.945	-	+ 12.963	141.387	,	355.447	,
筆番号	9	6455.871	-	+ 2.365	3690.813	-	+ 15.879	93.226	,	25.573	,
④	60 ⁰	6458.542	-	+ 8.684	3690.066	-	+ 2.111	18.032	,	,	87.413
	10	6464.555	-	+ 11.029	3688.702	-	+ 12.710	,	199.549	,	95.974
	27	6469.571	-	+ 3.648	3703.776	-	+ 17.243	,	337.463	86.735	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,
			-	-		-	-	,	,	,	,

控除シタル値

X = 於テ 6450

y = 於テ 3680

$$\bar{z} = \frac{252.645}{25} = \frac{537.012}{25} = \frac{467.735}{25} = \frac{183.387}{25}$$

$$2S = \frac{284.367}{25} = \frac{284.368}{25}$$

$$S = \frac{142.184}{25}$$

43.01¹⁹. 年 月 日 印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	18 ⁴	6,456.031	-	+ 10.626	3,737.796	-	+ 16.623	256.865		295.916	
筆番号	30	6,448.127	-	0 9.129	3,722.990	-	+ 19.070	154.982			118.586
43	29	6,445.160	-	0 22.773	3,718.726	-	0 12.986		326.728		198.717
	17	6,470.900	-	+ 6.387	3,735.976	-	0 20.287		626.868	165.909	
	18 ⁴	6,458.773	-	+ 14.869	3,739.013	-	0 1.820		34.167	421.394	

控除シタル値

X = 於テ 6,460

y = 於テ 3,710

$$\bar{z} = \frac{411.867}{987.763} \quad \frac{893.219}{317.303}$$

$$2S = \frac{575.916}{575.916}$$

$$S = \frac{287.958}{87.117}$$

印
日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	30	6,448.127	-	+ 29.322	3,722.990	-	+ 118.756	339.990		967.333	
筆番号	8 ¹	6,435.838	-	+ 11.249	3,699.970	-	+ 25.834	150.819		112.153	
463	8 ²	6,436.878	-	0 10.325	3,697.156	-	+ 6.447	44.301			73.886
	17	6,446.163	-	0 18.993	3,693.529	-	+ 6.343	102.522			67.026
	9	6,455.871	-	0 18.997	3,690.813	-	0 25.197		651.872		15.445
	29	6,465.160	-	0 7.744	3,718.726	-	0 32.177		1,131.343	222.454	

控除シタル値

X = 於テ 6,430

y = 於テ 3,690

$$\bar{z} = \frac{637.632}{1,783.215} \quad \frac{1,307.960}{156.257}$$

$$2S = \frac{1,145.583}{1,145.583}$$

$$S = \frac{572.791}{173.279}$$

印
日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 58 ₃	20	6440.550	-	+ 21.705	3750.709	-	+ 8.835	140.459		666.539	
	33	6430.179	-	0 4.410	3735.910		+ 25.158	256.083			70.163
	31	6444.960	-	0 22.401	3725.551		0 3.916		97.743		124.348
	19 ^面	6452.580	-	0 6.924	3739.826		0 17.194		560.181		137.275
	19 ^面	6451.884	-	+ 12.030	3742.745		0 10.883		346.994	273.622	

控除シクル値

X = 於テ 6.420

y = 於テ 3.720

$$\bar{X} = \frac{396.542}{25} = 15.86168$$

$$2S = \frac{608.376}{25} = 24.33504$$

$$S = \frac{304.188}{25} = 12.16752$$

92.02坪 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 58 ₃	33	6430.179	-	+ 22.522	3735.910	-	+ 0.686	6.923		259.546	
	34	6428.438	-	0 8.382	3724.865		+ 22.345	54.470			124.598
	32	6438.561	-	0 22.622	3713.565		0 0.686		12.733		80.294
	31	6444.960	-	+ 8.382	3725.551		0 22.345		557.731	130.348	

控除シクル値

X = 於テ 6.420

y = 於テ 3.710

$$\bar{X} = \frac{61.460}{25} = 2.4584$$

$$2S = \frac{609.008}{25} = 24.36032$$

$$S = \frac{304.502}{25} = 12.18008$$

76.99坪 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 491	34	6422.438	-	+26.081	3724.865	-	+2.908	36.170	,	668.504	,
	6	6412.480	-	⊖0.708	3710.657	-	+20.812	51.619	,	,	3.282
	13	6422.746	-	⊖16.830	3704.051	-	+9.958	126.925	,	,	65.195
	7 ^分	6429.310	-	⊖9.426	3700.699	-	+2.456	47.387	,	,	6.589
	7 ^分	6432.172	-	⊖9.261	3701.597	-	⊖12.866	,	285.266	,	10.776
	32	6438.561	-	+9.732	3713.565	-	⊖23.268	,	664.557	132.082	,

控除シタル値

X=於テ 6.410

y=於テ 3.700

$$\bar{X} = \frac{262}{10} = 26.2$$

$$2S = \frac{487.721}{10} = 48.7721$$

$$S = 24.3861$$

年 月 日

10.11.27

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 51	21 ^分	6426.399	-	+15.362	3758.235	-	+13.792	226.175	,	433.746	,
	35	6414.919	-	⊖2.780	3744.765	-	+22.325	89.784	,	,	55.812
	32	6430.179	-	⊖26.531	3735.910	-	⊖5.944	,	119.244	,	156.798
	20	6440.550	-	+7.983	3750.709	-	⊖22.647	,	491.866	16.586	,
	21 ^分	6429.381	-	+14.151	3758.557	-	+7.526	,	145.861	404.110	,

控除シタル値

X=於テ 6.410

y=於テ 3.730

$$\bar{X} = \frac{315.899}{10} = 31.5899$$

$$2S = \frac{641.772}{10} = 64.1772$$

$$S = 32.0886$$

97.07

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 50 ₁	35	6416.019	-	+ 25.172	3744.765	-	+ 19.950	13.318		623.385	
	36	6405.007	-	+ 8.419	3734.960	-	+ 19.900	99.639			125.948
	34	6422.438	-	+ 25.172	3724.865	-	+ 19.950		21.316		132.462
	33	6430.179	-	+ 8.419	3735.910	-	+ 19.900		600.562	133.946	

控除シクル値

X = 於テ 6.400

y = 於テ 3.720

$\Sigma = \frac{112.957}{621.078} \quad \frac{757.331}{248.410}$

$\Sigma S = \frac{508.921}{508.921}$

S = 254.460

76.97⁹ 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 50 ₂	36	6405.007	-	+ 25.240	3734.960	-	+ 1.599		23.996	429.990	
	5 ¹	6377.198	-	+ 7.725	3726.464	-	+ 11.494	22.734		127.184	
	5 ²	6397.282	-	+ 4.677	3723.466	-	+ 7.462	54.338			62.980
	B ¹	6401.875	-	+ 14.656	3719.002	-	+ 12.460	147.963			131.933
	B ²	6411.938	-	+ 10.605	3711.006	-	+ 8.345	183.073			10.669
	6	6412.480	-	+ 10.500	3710.657	-	+ 13.859		311.550		6.899
	34	6422.438	-	+ 7.473	3724.865	-	+ 24.303		788.341	111.086	

控除シクル値

X = 於テ 6.390

y = 於テ 3.710

$\Sigma = \frac{468.108}{1123.887} \quad \frac{868.260}{202.481}$

$\Sigma S = \frac{655.779}{655.779}$

S = 327.890

99.19⁹ 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	筆番号	40	6390.140	-	↑ 24.265 3766.335	-	⊖ 0.378		- 7.813	639.019	
	565	2	6372.683	-	↑ 13.021 3755.620	-	+ 17.940	48.133		203.388	
		80°	6377.119	-	⊖ 8.574 3748.395	-	+ 13.270	94.469			71.979
		3	6381.257	-	⊖ 19.829 3742.350	-	⊖ 6.847		77.077		46.598
		39	6396.948	-	⊖ 8.883 3755.242	-	⊖ 23.985		646.348		135.395

控除シタル値

X = 於テ 6370

y = 於テ 3760

$\bar{x} = 142.602$ $\bar{y} = 731.038$ $\bar{z} = 842.407$ $\bar{w} = 253.976$

$\Sigma S = 588.436$ $\Sigma S = 588.435$

S = 294.218

89.00 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6	筆番号	41	6386.932	-	↑ 20.665 3771.562	-	+ 5.487	147.776		445.579	
	566	1	6369.475	-	↑ 14.249 3760.848	-	+ 15.942	151.050		154.573	
		2	6372.683	-	⊖ 20.665 3755.620	-	⊖ 5.487		69.592		116.137
		40	6390.140	-	⊖ 14.249 3766.335	-	⊖ 15.942		480.492		232.757

控除シタル値

X = 於テ 6360

y = 於テ 3750

$\bar{x} = 298.826$ $\bar{y} = 550.084$ $\bar{z} = 600.152$ $\bar{w} = 348.894$

$\Sigma S = 251.258$ $\Sigma S = 251.258$

S = 125.629

38.00 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
6 筆番号 ⑧	43	6,397.899	-	+ 38,499	3,800.178	-	017.226			470,253	1931.578
	42	6,377.016	-	+ 351	3,787.722	-	+46,930	315,139		13,240	
	39	6,396.948	-	⊖ 38,499	3,755.248	-	+17,226	464,206			201,812
	23	6,415.513	-	⊖ 351	3,770.496	-	046,930		2,044,899		7,194

控除シタル値

X = 於テ 6,370

y = 於テ 3,750

$\Sigma = 779,345$ $2S = 1,725,807$ $S = 867,903$

$\Sigma = 2,515,154$ $2S = 1,735,806$ $S = 867,903$

$S = 867,903$

262,547 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ○											

控除シタル値

X = 於テ

y = 於テ

$\Sigma =$ $2S =$ $S =$

$2S =$ $S =$

年 月 日

面積計算用紙

街廓番号 6	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 55	44	6370.351	-	131.095	3798.577	-	918.295			372.322	1199.552
	44 ¹	6355.837	-	15.701	3789.857	-	13.576	79.263			468.785
	44 ²	6354.650	-	13.638	3785.001	-	29.009	134.892			360.966
	1	6369.475	-	32.282	3760.848	-	113.439	261.725			27.375
	41	6386.932	-	876	3771.562	-	37.729		1393.407		10.128

控除シタル値

X = 於テ 6.350

y = 於テ 3.760

$$\bar{z} = \frac{475.860}{28} = 17.0 \quad \frac{1765.729}{28} = 63.1 \quad \frac{1.668.337}{28} = 59.6 \quad \frac{378.467}{28} = 13.5$$

$$2S = 1289.869 \quad 1289.870$$

$$S = 644.935$$

195.09 年 月 日

面積計算用紙

街廓番号 6	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 58	410 ²	6387.738	-	22.244	3809.021	-	9.459	164.401			645.563
	44	6370.351	-	10.726	3798.577	-	21.299	7.476			199.220
	42	6377.014	-	26.948	3787.782	-	1.595		11.187		208.092
	43	6397.299	-	15.581	3800.172	-	20.112		549.037		314.300
	410 ¹	6392.595	-	9.561	3807.234	-	8.849		199.943	266.121	

控除シタル値

X = 於テ 6.370

y = 於テ 3.780

$$\bar{z} = \frac{171.677}{28} = 6.1 \quad \frac{760.167}{28} = 27.2 \quad \frac{1.110.884}{28} = 39.7 \quad \frac{522.392}{28} = 18.7$$

$$2S = 588.490 \quad 588.492$$

$$S = 294.245$$

89.01 年 月 日

面積計算用紙

街廓番号 6	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑩	16 ²	6,486.515	-	↑ 6.573	3,732.067	-	↑ 0.623	22.749	,	539.426	,
	16 ¹	6,487.959	-	+ 12.163	3,729.437	-	+ 43.521	1,652.014	,	966.192	,
	11 ²	6,474.352	-	↑ 16.220	3,688.546	-	+ 42.364	1,031.648	,	625.216	,
	11 ¹	6,471.739	-	⊖ 5.460	3,687.073	-	↑ 3.303	71.894	,	,	202.419
	12 ¹	6,479.812	-	⊖ 6.599	3,685.243	-	⊖ 0.784	,	23.373	,	232.569
	12 ²	6,478.338	-	⊖ 12.090	3,687.857	-	⊖ 43.374	,	1,229.132	,	457.691
	15 ²	6,491.902	-	⊖ 16.194	3,728.617	-	⊖ 42.203	,	1,768.390	,	1,273.126
	15 ¹	6,494.532	-	↑ 5.387	3,730.060	-	⊖ 3.450	,	153.625	431.283	,

控除シタル値

X = 於テ 6.450

y = 於テ 3.650

$$\Sigma = 2,778.245 \quad 3,176.530 \quad 2,562.117 \quad 2,165.803$$

$$2S = 396.315$$

$$396.314$$

$$S = 198.157$$

59.94坪

年 月 日

面積計算用紙

街廓番号 6	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑩	19 ²	6,451.886	-	↑ 3.740	3,742.745	-	⊖ .199	,	6.345	197.266	,
	19 ¹	6,452.580	-	+ 19.712	3,739.826	-	+ 41.148	1,340.602	,	982.170	,
	7 ²	6,432.172	-	+ 23.270	3,701.597	-	+ 39.127	476.254	,	269.862	,
	7 ¹	6,429.310	-	⊖ 2.020	3,700.699	-	+ 3.391	31.570	,	,	21.612
	9 ²	6,434.192	-	⊖ 7.568	3,698.206	-	+ 3.543	50.282	,	,	62.103
	8 ²	6,436.878	-	⊖ 1.646	3,697.156	-	⊖ 1.766	,	29.773	,	11.777
	8 ¹	6,435.838	-	⊖ 19.153	3,699.970	-	⊖ 40.640	,	643.656	,	190.955
	18 ²	6,456.031	-	⊖ 22.935	3,737.796	-	⊖ 39.043	,	1,406.758	,	1,096.201
	18 ¹	6,458.773	-	⊖ .289	3,739.013	-	⊖ 1.831	,	70.993	,	14.165
	9 ¹	6,456.320	-	+ 6.889	3,739.627	-	⊖ 3.722	,	13.546	341.880	,

X = 於テ 6.420

y = 於テ 3.690

$$\Sigma = 7,822.708 \quad 2,213.011 \quad 1,791.178 \quad 1,396.815$$

$$2S = 394.363$$

$$394.363$$

$$S = 197.181$$

59.65坪

年 月 日

面積計算用紙

街廓番号 6	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑤	23	6415.513	-	+ 19.029	3770.496	-	+ 9.831	250.818		580.308	
	38	6398.852	-	+ 6.843	3756.806	-	+ 25.639	226.956		115.003	
	37	6408.670	-	0 24.056	3744.857	-	0 3.542		66.189		116.840
	32 ^甲	6422.908	-	0 13.917	3760.348	-	0 18.674		607.942		283.183
	22 ^甲	6422.587	-	+ 5.027	3763.331	-	0 6.209		204.940	117.285	
	911 ^甲	6417.881	-	+ 7.074	3766.637	-	0 7.165		189.787	188.630	

控除シタル値

X = 於テ 6390

y = 於テ 3740

$$\bar{x} = \frac{477.774}{6} = 79.629$$

$$\bar{y} = \frac{601.604}{6} = 100.267$$

$$S = 300.502$$

90.90^甲 年 月 日

面積計算用紙

街廓番号 6	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑤	38	6398.852	-	+ 27.413	3756.806	-	+ 2.507	67.262		1068.963	
	3	6381.257	-	+ 14.673	3742.350	-	+ 19.616	23.903		323.472	
	11 ^甲	6384.379	-	0 10.193	3727.790	-	+ 12.901	54.493			181.333
	4 ^甲	6391.450	-	0 10.071	3729.449	-	+ 8.406	96.249			95.161
	4 ^乙	6394.450	-	0 17.220	3729.384	-	0 15.408		228.646		161.592
	37	6408.670	-	0 4.402	3744.857	-	0 27.422		786.189		109.421

控除シタル値

X = 於テ 6380

y = 於テ 3740

$$\bar{x} = \frac{273.907}{6} = 45.651$$

$$\bar{y} = \frac{784.928}{6} = 130.821$$

$$S = 392.464$$

118.72^甲 年 月 日

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
6 筆番号 183	22 ²	6422.587	-	+ 6.479	3763.331	-	0 1.791			58.363	280.482	
	22 ¹	6422.908	-	+ 28.137	3760.348	-	+ 33.967	1117.128			1135.272	
	4 ²	6394.450	-	+ 31.458	3729.384	-	+ 30.879	137.501			295.202	
	4 ¹	6391.450	-	+ 1.791	3729.469	-	+ 1.425	2.066			16.923	
	12 ²	6392.659	-	- 5.832	3727.959	-	+ 5.983	15.909				46.417
	5 ²	6397.282	-	- 4.539	3723.466	-	+ 1.495	10.887				15.732
	5 ¹	6397.198	-	- 29.117	3726.464	-	- 34.769		250.267			188.212
	21 ²	6426.399	-	- 32.183	3758.235	-	- 32.093		1168.153			1230.517
	21 ¹	6429.381	-	+ 3.812	3758.557	-	- 5.096		200.686	146.979		

控除シクル値

X = 於テ 6.390

y = 於テ 3.720

$\Sigma = 1283.491$ 1677.469 1874.858 1480.878

$2S = 393.978$ 393.980

S = 196.989

59.5947

年 月 日

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号												

控除シクル値

X = 於テ

y = 於テ

$\Sigma =$

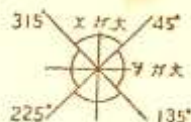
$2S =$

S =

年 月 日

多角点計算用紙

測量No. /



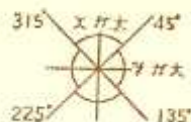
象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	視点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	913 ¹	1''		1''	.			.	.	.	.	6352.792	3788.028	913 ¹
913 ¹	913 ²			301 32 26	3.552			.	.	.	.	6354.650	3785.001	913 ²
913 ²	1				28.340			.	.	.	.	6369.475	3760.848	1
1	2	42.951			6.133			.	.	.	.	6372.683	3755.620	2
2	30°				8.678			.	.	.	.	6377.119	3748.395	30°
30°	3	12.852		304 33 40	7.326			.	.	.	.	6381.257	3742.350	3
3	9°				5.526			.	.	.	.	6384.379	3737.790	9°
9°	4°	12.853		310 06 18	10.936			.	.	.	.	6391.450	3729.449	4°
4°	12°				1.917			.	.	.	.	6392.659	3727.959	12°
12°	4°			315 48 59	3.556			.	.	.	.	6392.913	3727.712	4°
4°	5°	12.852			4.001			.	.	.	.	6395.782	3726.924	5°
5°	5°				2.092			.	.	.	.	6397.282	3723.466	5°
5°	13°				6.405			.	.	.	.	6401.875	3719.002	13°
13°	12°			321 31 46	12.853			.	.	.	.	6411.938	3711.006	12°
12°	6	12.852		327 16 12	6.645			.	.	.	.	6412.480	3710.657	6
6	13°				12.807			.	.	.	.	6422.746	3706.051	13°
13°	7°			332 56 59	7.371			.	.	.	.	6429.310	3700.699	7°
7°	7°	12.852			2.102			.	.	.	.	6431.182	3699.743	7°
7°	16°				3.379			.	.	.	.	6434.192	3698.206	16°
16°	8°			338 39 44	6.226			.	.	.	.	6434.775	3697.978	8°
8°	8°	12.852			2.258			.	.	.	.	6436.878	3697.156	8°
8°	9°				9.968			.	.	.	.	6446.163	3693.529	9°
9°	9			344 22 10	10.080			.	.	.	.	6455.871	3690.813	9

12.856

多角点計算用紙

測量No. 2



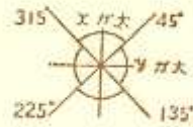
象 限	I	+	+	+
	II	-	-	+
	III	-	+	-
	IV	+	+	-

測点	視点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
9	EC°			344 22 10	2.776			.	.	.	.	6458.542	3690.066	EC°
EC°	10			347 13 38	6.165			.	.	.	.	6464.555	3688.702	10
10	11°				7.267			.	.	.	.	6471.739	3687.073	11°
11°	11°	23.658			2.026			.	.	.	.	6473.713	3686.626	11°
11°	12°				4.019			.	.	.	.	6477.633	3685.737	12°
12°	12°				2.236			.	.	.	.	6479.812	3685.243	12°
12°	94°				11.849			.	.	.	.	6491.367	3682.626	94°
94°	94°				3.376			.	.	.	.	6494.658	3681.878	94°
94°	94°			71 35 38	3.376			.	.	.	.	6495.723	3685.079	94°
94°	13				11.939			.	.	.	.	6499.498	3696.408	13
13	14	39.792			11.801			.	.	.	.	6503.218	3707.605	14
14	95°				16.052			.	.	.	.	6508.287	3722.836	95°
95°	95°				3.678			.	.	.	.	6509.448	3726.326	95°
95°	95°			165 56 41	3.678			.	.	.	.	6505.880	3727.219	95°
95°	15°				11.698			.	.	.	.	6496.532	3730.060	15°
15°	15°				2.065			.	.	.	.	6492.568	3730.557	15°
15°	16°	51.090			4.012			.	.	.	.	6488.656	3731.531	16°
16°	16°				2.207			.	.	.	.	6486.515	3726.067	16°
16°	17				16.097			.	.	.	.	6470.900	3725.976	17
17	18°				12.502			.	.	.	.	6458.773	3739.013	18°
18°	18°				1.903			.	.	.	.	6456.927	3739.475	18°
18°	912°				.626			.	.	.	.	6456.320	3739.627	912°
912°	19°			146 54 21	3.419			.	.	.	.	6453.523	3741.593	19°

協和建設測量

多角点計算用紙

測量 No. 3

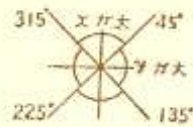


象 限	I	+	+	+
	II	-	-	+
	III	-	+	-
	IV	+	+	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
19 ^{II}	19 ^{II}			166 56 21	2.003			.	.	.	.	6451.884	3762.765	19 ^{II}
19 ^{II}	20				13.852			.	.	.	.	6440.550	3750.709	20
20	21 ^I	46.980			13.650			.	.	.	.	6429.381	3758.557	21 ^I
21 ^I	21 ^I				1.995			.	.	.	.	6427.769	3759.706	21 ^I
21 ^I	22 ^{III}				4.035			.	.	.	.	6424.448	3762.083	22 ^{III}
22 ^{III}	22 ^{III}				2.275			.	.	.	.	6422.587	3763.337	22 ^{III}
22 ^{III}	911 ^I				5.751			.	.	.	.	6417.881	3766.637	911 ^I
911 ^I	23			121 32 26	4.528			.	.	.	.	6415.513	3770.496	23
23	43	48.338			34.820			.	.	.	.	6397.299	3800.178	43
43	910 ^{IV}				8.990			.	.	.	.	6392.595	3807.836	910 ^{IV}
910 ^{IV}	910 ^{IV}				3.519			.	.	.	.	6390.754	3810.833	910 ^{IV}
910 ^{IV}	910 ^{IV}			210 59 43	3.519			.	.	.	.	6387.738	3809.021	910 ^{IV}
910 ^{IV}	44	37.216			20.282			.	.	.	.	6370.351	3798.577	44
44	913 ^I				16.932			.	.	.	.	6355.837	3789.857	913 ^I
913 ^I	913 ^I				3.552			.	.	.	.	6352.792	3788.028	913 ^I

多角点計算用紙

測量 No. _____

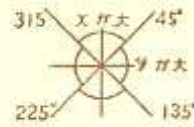


象	I	+	+	+
限	II	-	-	-
	III	-	-	-
	IV	+	+	+

測点	視点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	7 ²	"	"	"	"							6431.182	3699.743	7 ²
7 ²	7 ²			61.54.21	2.102	470922	882175	.990		1.856		6432.172	3701.597	7 ²
	7 ²			152.56.59	2.102	454772	890608		1.872	.956		4429.310	3700.699	7 ²
	19 ²													
19 ²	19 ²			241.54.21	2.003	470922	882175		.923		1.767	6452.580	3739.826	19 ²
	19 ²	15.855		144.54.21	2.003	574926	818205		1.139	1.152		6451.884	3742.745	19 ²
19 ²	20			"	13.857				11.336	7.944		4440.550	3750.709	20
20	33			234.58.33	18.071	573922	818910		10.397		14.799	6430.179	3735.910	33
33	36			"	17.488	"	"		7.741		11.045	6428.438	3726.865	36
	12 ²													
12 ²	6			327.14.12	.645	541178	840908	.542			.349	6411.938	3711.006	12 ²
	20													
20	21 ²			144.54.21	13.630	574926	818205		11.768	7.848		6429.381	3758.557	21 ²
21 ²	21 ²	15.645		"	1.995	"	"		1.632	1.147		6427.749	3759.704	21 ²
21 ²	21 ²			227.24.48	1.995	676705	736255		1.350		1.469	6426.399	3758.235	21 ²
	12 ²													
12 ²	5 ²			315.48.59	4.355	696957	717113	3.123			3.035	6392.659	3727.959	12 ²
5 ²	5 ²			"	2.092			1.500			1.458	6397.282	3723.466	5 ²
	5 ²			47.24.48	2.092	676705	736255	1.416		1.540		6397.198	3726.466	5 ²

多角点計算用紙

測量No. _____



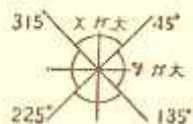
象 限	I	+	+	+
	II	-	-	+
	III	-	+	-
	IV	+	+	-

前点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N(+)	S(-)	E(+)	W(-)	X	Y	
	95°											6509.448	3726.326	95°
95°	15°	17.421		165 56 41	15.376	242858	970062	14.916	3.734			6494.532	3720.060	15°
15°	15°			"	2.065	"	"	1.984	.497			6492.548	3720.557	15°
15°	15°	19.730		251 35 38	2.065	315741	948845	.646		1.960		6491.908	3728.617	15°
15°	24			"	17.685	"	"	5.584		16.780		6486.318	3711.837	24
24	25			"	11.801	"	"	3.726		11.197		6482.598	3700.640	25
	95°											6509.448	3726.326	95°
95°	14			251 35 38	19.730	315741	948845	6.230		18.781		6503.218	3707.805	14
14	13			"	11.801	"	"	3.726		11.197		6499.492	3696.408	13
	24			251 35 38								6486.318	3711.837	24
24	26	90.00.00		161 35 38	4.000	315741	948845	3.795	1.263			6482.523	3713.100	26
	16°											6488.656	3731.531	16°
16°	16°			251 35 38	2.207	315741	948845	.497		2.094		6487.959	3729.437	16°
"	16°	18.304		165 56 41	2.207	242858	970062	2.141	.536			6486.515	3732.067	16°
16°	17			"	16.097	"	"	15.615	3.909			6470.900	3735.976	17
17	29	21.650		251 35 38	18.180	315741	948845	5.740		17.250		6465.160	3718.726	29
29	28			"	13.470	"	"	4.253		12.781		6460.907	3705.945	28
28	27	14.304		345 56 41	8.931	242858	970062	8.866		2.169		6469.571	3705.796	27
27	26			"	9.373	"	"	9.092		12.276		6478.663	3701.500	26
26	11°			251 35 38	15.276	315741	948845	4.950		14.874		6473.713	3686.626	11°

協和建設測量

多角点計算用紙

測量No. _____



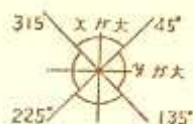
象 限	I	+	+	+
	II	-	-	+
	III	-	+	-
	IV	+	+	-

測点	観点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	21 ^π											6427.749	3759.704	21 ^π
21 ^π	35			227 24 48	20.290	676705	736255		13.730		14.929	6414.819	3766.765	35
35	36				13.318				9.012		9.805	6405.007	3734.960	36
36	36'	90 00 00		137 24 48	4.000	"	"		2.945	2.707		6402.062	3737.667	36'
	22 ^π											6426.448	3762.023	22 ^π
22 ^π	22 ^π '			227 24 48	2.275	676705	736255		1.540		1.675	6422.908	3760.348	22 ^π '
"	22 ^π ''			146 54 21	2.275	574926	818205		1.861	1.308		6422.587	3763.331	22 ^π ''
	4 ^π											6392.913	3727.712	4 ^π
4 ^π	4 ^π '			47 24 48	2.271	676705	736255	1.537		1.672		6394.450	3729.384	4 ^π '
"	4 ^π ''			130 06 18	2.271	646198	764859		1.463	1.737		6391.450	3729.449	4 ^π ''
	911 ^π											6417.821	3766.637	11 ^π
911 ^π	23			121 32 24	4.528	523077	852285		2.368	3.859		6415.513	3770.476	23
23	38			219 24 28	21.544	634835	772647		14.661		13.690	6398.852	3756.806	38
38	39				2.464	"	"		1.904		1.564	6396.948	3755.262	39
39	40			121 32 24	13.016	523077	852285		8.808	11.093		6390.140	3766.335	40
40	41				6.132	"	"		3.208	5.227		6386.932	3771.562	41
41	42			211 32 24	20.483	"	"		17.457		10.716	6369.475	3760.848	1
1	913 ^π			121 32 24	31.891	"	"		16.682	27.181		6352.992	3788.038	913 ^π
2	41				5.291	584527	825768		2.162	4.548		6386.932	3771.562	41
41	42			121 32 24	18.961	523077	852285		9.918	16.160		6377.014	3787.722	42

協和建設測量

多角点計算用紙

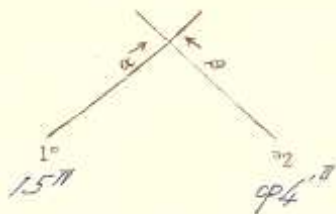
測量No. _____



象 限	I	+	+	+
	II	-	-	+
	III	-	+	-
	IV	+	+	-

測点	観点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	12 ²	° ' "		° ' "	.			.	.	.	.	4477.633	3685.737	12 ²
12 ²	12 ²			347 13 38	2.236	221076	975257 ^(B)	2.179	.	.	496	6479.812	3685.243	12 ²
12 ²	12 ²			71 35 38	2.236	315741	948845	.705	.	2.120	.	6478.338	3687.857	12 ²
	11 ²			.	.			.	.	.	.	6477.713	3686.626	11 ²
11 ²	11 ²			71 35 38	2.026	315741	948845	.639	.	1.920	.	6476.352	3688.546	11 ²
	11 ²			167 13 38	2.026	221076	975257	.	1.976	.467	.	6471.739	3687.073	11 ²
	9 ⁶			.	.			.	.	.	.	6436.192	3698.206	9 ⁶
9 ⁶	8 ²			338 39 44	.626	363884	931424 ^(B)	.583	.	.228	.	6436.775	3697.978	8 ²
8 ²	8 ²			"	2.258	"	"	2.103	.	.922	.	6436.878	3697.156	8 ²
	8 ²			61 54 21	2.258	470922	882175	1.063	.	1.992	.	6435.838	3699.970	8 ²
	9 ¹²			.	.			.	.	.	.	6456.320	3739.627	9 ¹²
9 ¹²	18 ²			345 56 41	.626	242858	970068 ^(B)	.607	.	.152	.	6456.927	3739.475	18 ²
18 ²	18 ²			"	1.903	"	"	1.846	.	.662	.	6458.773	3739.013	18 ²
	18 ²			261 54 31	1.903	470922	882175	.	.896	1.679	.	6456.031	3737.796	18 ²
	30			.	.			.	.	.	.	6448.127	3722.990	30
30	30'			151 54 31	0.000	470922	882175	.	3.529	1.884	.	6446.598	3726.874	30'

算出点 12°



$$\begin{aligned} 94^{\circ} X_2 &= -61496 \cdot 1658 \\ 157^{\circ} X_1 &= -61496 \cdot 1548 \\ \Delta X &= -11121 \cdot 110 \end{aligned}$$

$$\alpha = 157^{\circ} - 94^{\circ} - 98^{\circ}$$

$$\beta = 167^{\circ} - 13^{\circ} - 138^{\circ}$$

$$\beta - \alpha = 195^{\circ} - 38^{\circ} - 60^{\circ}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +1127 \cdot 47444 \\ \Delta X \times \textcircled{4} &= +1111 \cdot 46609 \\ E &= 1147 \cdot 100795 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 1271 \cdot 23161$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \quad 1116 \cdot 1915 \\ X_1 &= -61496 \cdot 1548 \\ X &= -614771 \cdot 1633 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \quad 1146 \cdot 1820 \\ Y_1 &= -317310 \cdot 1557 \\ Y &= -31685 \cdot 1737 \end{aligned}$$

$$\begin{aligned} Y_2 &= -31681 \cdot 1878 \\ Y_1 &= -317310 \cdot 1557 \\ \Delta Y &= -9148 \cdot 1679 \end{aligned}$$

$$\text{Cos} \alpha = 0 \cdot 1217517501 \textcircled{1}$$

$$\text{Sin} \alpha = 9 \cdot 19488846 \textcircled{2}$$

$$\text{Cos} \beta = 0 \cdot 1975125151 \textcircled{3}$$

$$\text{Sin} \beta = + \cdot 1221101815 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 199511701 \textcircled{5}$$

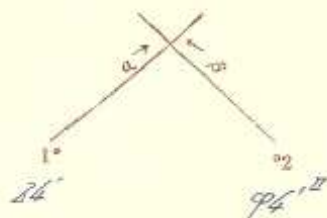
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1121 \cdot 37039 \\ \Delta X \times \textcircled{2} &= 91121 \cdot 100206 \\ F &= 117 \cdot 37265 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 117 \cdot 4568$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \quad 1117 \cdot 1025 \\ X_2 &= -61496 \cdot 1658 \\ X &= -614771 \cdot 1633 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \quad 1113 \cdot 1859 \\ Y_2 &= -31681 \cdot 1878 \\ Y &= -31686 \cdot 1737 \end{aligned}$$

算出点 11°



$$\begin{aligned} 94^{\circ} X_2 &= -61496 \cdot 1658 \\ 24^{\circ} X_1 &= -61488 \cdot 1523 \\ \Delta X &= -11121 \cdot 1315 \end{aligned}$$

$$\alpha = 24^{\circ} - 94^{\circ} - 38^{\circ}$$

$$\beta = 167^{\circ} - 13^{\circ} - 98^{\circ}$$

$$\beta - \alpha = 195^{\circ} - 38^{\circ} - 60^{\circ}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +1121 \cdot 46941 \\ \Delta X \times \textcircled{4} &= +1111 \cdot 46887 \\ E &= 127 \cdot 176616 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 127 \cdot 19053$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \quad 1118 \cdot 1810 \\ X_1 &= -61488 \cdot 1523 \\ X &= -614731 \cdot 1713 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \quad 1126 \cdot 1476 \\ Y_1 &= -317310 \cdot 11010 \\ Y &= -31686 \cdot 1636 \end{aligned}$$

$$\begin{aligned} Y_2 &= -31681 \cdot 1878 \\ Y_1 &= -31713 \cdot 11010 \\ \Delta Y &= -91171 \cdot 2882 \end{aligned}$$

$$\text{Cos} \alpha = 0 \cdot 1217517501 \textcircled{1}$$

$$\text{Sin} \alpha = 9 \cdot 19488846 \textcircled{2}$$

$$\text{Cos} \beta = 0 \cdot 1975125151 \textcircled{3}$$

$$\text{Sin} \beta = + \cdot 1221101815 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 199511701 \textcircled{5}$$

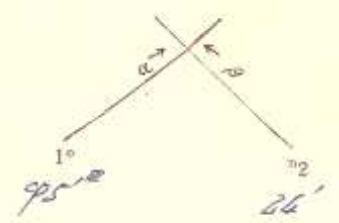
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1119 \cdot 185835 \\ \Delta X \times \textcircled{2} &= 01111 \cdot 111220 \\ F &= 1121 \cdot 13725 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 121 \cdot 14763$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \quad 1121 \cdot 1945 \\ X_2 &= -61496 \cdot 1658 \\ X &= -614731 \cdot 1713 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \quad 1116 \cdot 17268 \\ Y_2 &= -31681 \cdot 1878 \\ Y &= -31686 \cdot 1636 \end{aligned}$$

算出点 16



$$\begin{aligned} 26' X_2 &= -644821.1523 \\ 95' X_1 &= -615109.1448 \\ \Delta X &= -0.126109215 \end{aligned}$$

$$\alpha = 185^\circ - 36' - 48''$$

$$\beta = 171^\circ - 35' - 38''$$

$$\beta - \alpha = 185^\circ - 38' - 57''$$

$$\begin{aligned} \Delta Y \times ③ &= 0.1140.177617 \\ \Delta X \times ④ &= 0.1261.154757 \\ E &= 1.121.171214 \end{aligned}$$

$$S_1 = \frac{|E|}{⑤} = 1.121.171214$$

$$\begin{aligned} S_1 \times ① &= 9.112101.1792 \\ X_1 &= -615109.1448 (+) \\ X &= -644821.1523 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= +1.1111.12105 \\ Y_1 &= -3171161.1326 (+) \\ Y &= -3171161.1326 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3171161.1326 \\ Y_1 &= -3171161.1326 \\ \Delta Y &= -0.1111.12105 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 9.112101.1792 \text{ ①} \\ \text{Sin} \alpha &= +.112101.1792 \text{ ②} \\ \text{Cos} \beta &= +.112101.1792 \text{ ③} \\ \text{Sin} \beta &= +.112101.1792 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.112101.1792 \text{ ⑤} \end{aligned}$$

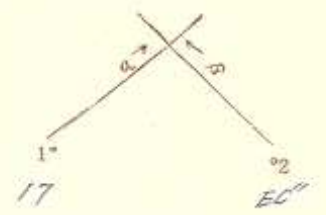
$$\begin{aligned} \Delta Y \times ① &= +1.1121.1792 \\ \Delta X \times ② &= 0.1121.1792 \\ F &= 1.1121.1792 \end{aligned}$$

$$S_2 = \frac{|F|}{⑤} = 1.1121.1792$$

$$\begin{aligned} S_2 \times ③ &= +1.1111.12105 \\ X_2 &= -644821.1523 (+) \\ X &= -644821.1523 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= +1.1111.12105 \\ Y_2 &= -3171161.1326 (+) \\ Y &= -3171161.1326 \end{aligned}$$

算出点 9



$$\begin{aligned} EC'' X_2 &= -64458.1542 \\ 17 X_1 &= -64470.19010 \\ \Delta X &= -0.11121.171214 \end{aligned}$$

$$\alpha = 125^\circ - 38' - 38''$$

$$\beta = 180^\circ - 38' - 10''$$

$$\beta - \alpha = 192^\circ - 46' - 32''$$

$$\begin{aligned} \Delta Y \times ③ &= -1.1144.121220 \\ \Delta X \times ④ &= 0.11121.171214 \\ E &= 1.107.154195 \end{aligned}$$

$$S_1 = \frac{|E|}{⑤} = 1.107.154195$$

$$\begin{aligned} S_1 \times ① &= 0.11121.171214 \\ X_1 &= -64470.19010 (+) \\ X &= -64458.1542 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= 0.11121.171214 \\ Y_1 &= -3171161.1326 (+) \\ Y &= -316901.1873 \end{aligned}$$

$$\begin{aligned} Y_2 &= -316901.1873 \\ Y_1 &= -3171161.1326 \\ \Delta Y &= -0.1121.171214 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 9.112101.1792 \text{ ①} \\ \text{Sin} \alpha &= 9.112101.1792 \text{ ②} \\ \text{Cos} \beta &= 9.112101.1792 \text{ ③} \\ \text{Sin} \beta &= +.112101.1792 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.112101.1792 \text{ ⑤} \end{aligned}$$

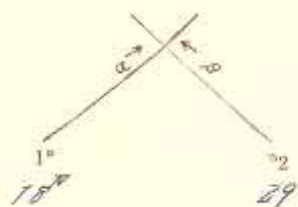
$$\begin{aligned} \Delta Y \times ① &= +1.116.121220 \\ \Delta X \times ② &= +1.111.171214 \\ F &= 1.112.171214 \end{aligned}$$

$$S_2 = \frac{|F|}{⑤} = 1.112.171214$$

$$\begin{aligned} S_2 \times ③ &= 0.11121.171214 \\ X_2 &= -.64458.1542 (+) \\ X &= -.64458.1542 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= +1.1111.12105 \\ Y_2 &= -316901.1873 (+) \\ Y &= -316901.1873 \end{aligned}$$

算出点 30



$$\begin{aligned} 29 \quad X_2 &= -64651.760 \\ 18 \quad X_1 &= -64556.927 \\ \Delta X &= -1118.833 \end{aligned}$$

$$\begin{aligned} Y_2 &= -37718.786 \\ Y_1 &= -37391.475 \\ \Delta Y &= -2120.769 \end{aligned}$$

$$\alpha = 121^\circ - 54' - 28''$$

$$\cos \alpha = 0.1671019221 \text{ ①}$$

$$\sin \alpha = 0.18827175 \text{ ②}$$

$$\beta = 125^\circ - 28' - 42''$$

$$\cos \beta = 0.1970106121 \text{ ③}$$

$$\sin \beta = +0.1242815181 \text{ ④}$$

$$\beta - \alpha = 126^\circ - 02' - 20''$$

$$\sin(\beta - \alpha) = -0.1971017121 \text{ ⑤}$$

$$\Delta Y \times \text{③} = +1120.72782$$

$$\Delta Y \times \text{①} = +1119.77116$$

$$\Delta X \times \text{④} = +1111.99945$$

$$\Delta X \times \text{②} = 9117.26295$$

$$E = 1118.12837$$

$$F = 1119.103611$$

$$S_1 = \frac{E}{\text{⑤}} = 118.18865$$

$$S_2 = \frac{F}{\text{⑤}} = 117.15586$$

$$S_1 \times \text{①} = 9118.1800$$

$$S_2 \times \text{③} = 9117.1033$$

$$X_1 = -64556.927 (+)$$

$$X_2 = -64651.760 (+)$$

$$X = -64608.127$$

$$X = -64618.127$$

$$S_1 \times \text{②} = 91118.1485$$

$$S_2 \times \text{④} = 71114.2164$$

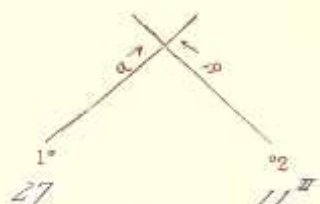
$$Y_1 = -37391.475 (+)$$

$$Y_2 = -37718.786 (+)$$

$$Y = -37221.9910$$

$$Y = -37221.9910$$

算出点 10



$$\begin{aligned} 11 \quad X_2 &= -64721.713 \\ 27 \quad X_1 &= -64609.577 \\ \Delta X &= -1114.136 \end{aligned}$$

$$\begin{aligned} Y_2 &= -36886.626 \\ Y_1 &= -37013.176 \\ \Delta Y &= -2117.150 \end{aligned}$$

$$\alpha = 125^\circ - 54' - 38''$$

$$\cos \alpha = 0.1211111111 \text{ ①}$$

$$\sin \alpha = 0.1948888889 \text{ ②}$$

$$\beta = 127^\circ - 22' - 38''$$

$$\cos \beta = 0.1971511111 \text{ ③}$$

$$\sin \beta = +0.1211111111 \text{ ④}$$

$$\beta - \alpha = 195^\circ - 58' - 04''$$

$$\sin(\beta - \alpha) = -0.1991111111 \text{ ⑤}$$

$$\Delta Y \times \text{③} = +116.72552$$

$$\Delta Y \times \text{①} = +111.111111$$

$$\Delta X \times \text{④} = +1111.91579$$

$$\Delta X \times \text{②} = 9111.111111$$

$$E = 1111.80989$$

$$F = 1111.111111$$

$$S_1 = \frac{E}{\text{⑤}} = 125.18866$$

$$S_2 = \frac{F}{\text{⑤}} = 119.13106$$

$$S_1 \times \text{①} = 9111.10116$$

$$S_2 \times \text{③} = 9119.1158$$

$$X_1 = -64609.577 (+)$$

$$X_2 = -64721.713 (+)$$

$$X = -64614.555$$

$$X = -64614.555$$

$$S_1 \times \text{②} = 91111.10176$$

$$S_2 \times \text{④} = 71112.10176$$

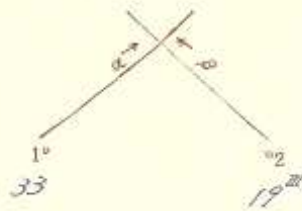
$$Y_1 = -37013.176 (+)$$

$$Y_2 = -36886.626 (+)$$

$$Y = -36888.1702$$

$$Y = -36888.1702$$

算出点 31



$$\begin{aligned} 19^\circ X_2 &= -64531.5523 \\ 33 X_1 &= -64310.1179 \\ \Delta X &= -11221.4344 \end{aligned}$$

$$\begin{aligned} Y_2 &= -37471.5193 \\ Y_1 &= -37351.910 \\ \Delta Y &= +119.6093 \end{aligned}$$

$$\alpha = 126^\circ - 58' - 33''$$

$$\beta = 241^\circ - 54' - 21''$$

$$\beta - \alpha = 196^\circ - 55' - 48''$$

$$\begin{aligned} \text{Cos} \alpha &= + \cdot 181891101 \text{ ①} \\ \text{Sin} \alpha &= 9 \cdot 5739222 \text{ ②} \\ \text{Cos} \beta &= 9 \cdot 147019221 \text{ ③} \\ \text{sin} \beta &= 9 \cdot 18821751 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= - \cdot 9926196 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 9118.67625 \\ \Delta X \times \text{④} &= 9120.59349 \\ E &= 117.91724 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +119.60987 \\ \Delta X \times \text{②} &= 9113.39764 \\ F &= 118.105151 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 118.10491$$

$$S_2 = \frac{F}{\text{⑤}} = 118.11846$$

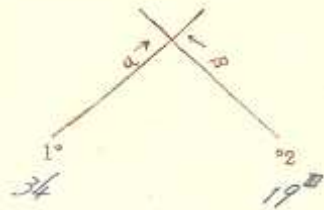
$$\begin{aligned} S_1 \times \text{①} &= + 1176.1707 \\ X_1 &= -64310.1179 \\ X &= -64461.9610 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 91118.5613 \\ X_2 &= -64531.5523 \\ X &= -64461.9610 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 91170.1359 \\ Y_1 &= -37351.910 \\ Y &= -37251.5511 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 91118.0428 \\ Y_2 &= -37471.5193 \\ Y &= -37251.5511 \end{aligned}$$

算出点 32



$$\begin{aligned} 19^\circ X_2 &= -64531.5523 \\ 34 X_1 &= -64221.1238 \\ \Delta X &= -1131.4285 \end{aligned}$$

$$\begin{aligned} Y_2 &= -37471.5193 \\ Y_1 &= -37241.865 \\ \Delta Y &= +116.7288 \end{aligned}$$

$$\alpha = 119^\circ - 11' - 11''$$

$$\beta = 119^\circ - 11' - 11''$$

$$\beta - \alpha = 0^\circ - 0' - 0''$$

$$\begin{aligned} \text{Cos} \alpha &= - \cdot 111111111 \text{ ①} \\ \text{Sin} \alpha &= - \cdot 111111111 \text{ ②} \\ \text{Cos} \beta &= - \cdot 111111111 \text{ ③} \\ \text{sin} \beta &= - \cdot 111111111 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= - \cdot 111111111 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 9117.87798 \\ \Delta X \times \text{④} &= 9127.22211 \\ E &= 119.54283 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +119.69873 \\ \Delta X \times \text{②} &= 9117.86037 \\ F &= 119.153910 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 119.68887$$

$$S_2 = \frac{F}{\text{⑤}} = 119.17718$$

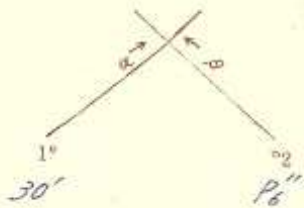
$$\begin{aligned} S_1 \times \text{①} &= + 11161.1223 \\ X_1 &= -64221.1238 \\ X &= -64310.1561 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 91112.1962 \\ X_2 &= -64531.5523 \\ X &= -64310.1561 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 91171.3100 \\ Y_1 &= -37241.865 \\ Y &= -37173.1565 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 91128.0228 \\ Y_2 &= -37471.5193 \\ Y &= -37173.1565 \end{aligned}$$

算出點 7°



$$\begin{aligned} 16'' X_2 &= -61434.1192 \\ 30' X_1 &= -61444.598 \\ \hline \Delta X &= -0.1110.406 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3698.8106 \\ Y_1 &= -3724.874 \\ \hline \Delta Y &= -2.1261.668 \end{aligned}$$

$$\begin{aligned} \alpha &= 126^{\circ} - 56' - 8'' \\ \beta &= 158^{\circ} - 56' - 59'' \\ \beta - \alpha &= 192^{\circ} - 02' - 38'' \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 9.14701922 \text{ ①} \\ \text{Sin} \alpha &= 9.1882175 \text{ ②} \\ \text{Cos} \beta &= 9.189106081 \text{ ③} \\ \text{Sin} \beta &= +.14514772 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.19991814 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +.123.751073 \\ \Delta X \times \text{④} &= 9.1141.79236 \\ \hline E &= 1.28.48308 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +.1121.95855 \\ \Delta X \times \text{②} &= +.119.17992 \\ \hline F &= 1.17.137864 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1.28.141878$$

$$S_2 = \frac{F}{\text{⑤}} = 1.17.137192$$

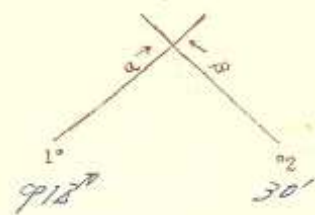
$$\begin{aligned} S_1 \times \text{①} &= 9.1173.1216 \\ X_1 &= -61444.598 (+) \\ X &= -61437.1182 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 9.1117.1010 \\ X_2 &= -61434.1192 (+) \\ X &= -61437.1182 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 9.1125.1137 \\ Y_1 &= -3724.874 (+) \\ Y &= -3699.1743 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= +.1117.1537 \\ Y_2 &= -3698.8106 (+) \\ Y &= -3699.1743 \end{aligned}$$

算出點 19°



$$\begin{aligned} 30' X_2 &= -61444.598 \\ 912'' X_1 &= -61456.1320 \\ \hline \Delta X &= -0.1111.722 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3724.874 \\ Y_1 &= -3739.1627 \\ \hline \Delta Y &= -9.1141.289 \end{aligned}$$

$$\begin{aligned} \alpha &= 142^{\circ} - 56' - 28'' \\ \beta &= 161^{\circ} - 56' - 28'' \\ \beta - \alpha &= 197^{\circ} - 00' - 00'' \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 9.181820181 \text{ ①} \\ \text{Sin} \alpha &= +.15741922 \text{ ②} \\ \text{Cos} \beta &= +.14701922 \text{ ③} \\ \text{Sin} \beta &= +.18182175 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.19991814 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 9.1118.194757 \\ \Delta X \times \text{④} &= 2.1114.134086 \\ \hline E &= 1.17.137864 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +.1121.95855 \\ \Delta X \times \text{②} &= 9.1116.179924 \\ \hline F &= 1.17.137864 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1.17.141878$$

$$S_2 = \frac{F}{\text{⑤}} = 1.17.137192$$

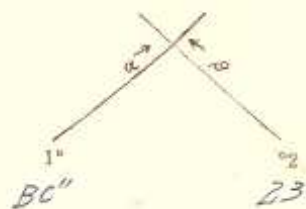
$$\begin{aligned} S_1 \times \text{①} &= 9.1117.1797 \\ X_1 &= -61456.1320 (+) \\ X &= -61453.1525 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= +.1118.1925 \\ X_2 &= -61444.598 (+) \\ X &= -61453.1525 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= +.1117.19166 \\ Y_1 &= -3739.1627 (+) \\ Y &= -3724.874 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= +.1116.1719 \\ Y_2 &= -3724.874 (+) \\ Y &= -3724.874 \end{aligned}$$

算出點 3



$$\begin{aligned} 23 \quad X_2 &= -6415.5113 \\ BC'' \quad X_1 &= -6377.1117 \\ \Delta X &= -1131.8196 \end{aligned}$$

$$\alpha = 306^\circ - 23' - 40''$$

$$\beta = 219^\circ - 24' - 28''$$

$$\beta - \alpha = 195^\circ - 04' - 48''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 9117.107627 \\ \Delta X \times \textcircled{4} &= 9144.37385 \\ E &= 117.266173 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 117.42556$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 114.238 \\ X_1 &= -6377.1117 (+) \\ X &= -6312.8737 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \\ Y_1 &= -3770.1496 (+) \\ Y &= -3770.1496 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3777.01496 \\ Y_1 &= -3770.1496 (-) \\ \Delta Y &= +6.86534 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= +0.564887 \textcircled{1} \\ \sin \alpha &= 0.82451618 \textcircled{2} \\ \cos \beta &= 0.177216141 \textcircled{3} \\ \sin \beta &= 0.161248815 \textcircled{4} \\ \sin(\beta - \alpha) &= -0.19961714 \textcircled{5} \end{aligned}$$

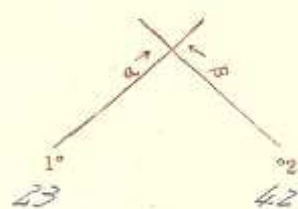
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +112.48497 \\ \Delta X \times \textcircled{2} &= 9121.68150 (-) \\ F &= 146.18602 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{6}} = 146.18602$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \\ X_2 &= -6415.5113 (+) \\ X &= -6312.8737 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \\ Y_2 &= -3777.01496 (+) \\ Y &= -3777.01496 \end{aligned}$$

算出點 43



$$\begin{aligned} 42 \quad X_2 &= -6377.1014 \\ 23 \quad X_1 &= -6415.5113 (-) \\ \Delta X &= -138.4099 \end{aligned}$$

$$\alpha = 122^\circ - 32' - 24''$$

$$\beta = 131^\circ - 32' - 24''$$

$$\beta - \alpha = 9^\circ - 00' - 00''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +114.68109 \\ \Delta X \times \textcircled{4} &= 9120.12860 (-) \\ E &= 124.81989 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 114.68109$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \\ X_1 &= -6415.5113 (+) \\ X &= -6397.299 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +129.6176 \\ Y_1 &= -3770.1496 (+) \\ Y &= -3800.1172 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3787.7222 \\ Y_1 &= -3770.1496 (-) \\ \Delta Y &= +17.5726 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0.15231096 \textcircled{1} \\ \sin \alpha &= +0.9854275 \textcircled{2} \\ \cos \beta &= +0.1854275 \textcircled{3} \\ \sin \beta &= +0.9821092 \textcircled{4} \\ \sin(\beta - \alpha) &= -0.1111111 \textcircled{5} \end{aligned}$$

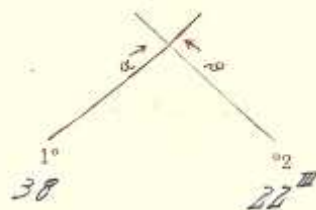
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0.119.01082 \\ \Delta X \times \textcircled{2} &= 0.132.81174 (-) \\ F &= 123.00092 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{6}} = 123.00092$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +120.1285 \\ X_2 &= -6377.1014 (+) \\ X &= -6397.299 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +112.450 \\ Y_2 &= -3787.7222 (+) \\ Y &= -3800.1172 \end{aligned}$$

算出点 37



$$\begin{aligned} 22^{\text{m}} X_2 &= -64241.448 \\ 38 X_1 &= -63981.852 \end{aligned}$$

$$\Delta X = -1125.596$$

$$\alpha = 198^{\circ} - 24' - 28''$$

$$\beta = 227^{\circ} - 24' - 48''$$

$$\beta - \alpha = 198^{\circ} - 00' - 20''$$

$$\Delta Y \times \text{③} = 0 \quad 115.53037$$

$$\Delta X \times \text{④} = 9 \quad 118.84518$$

$$E = 115.31481$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 115.4655$$

$$S_1 \times \text{①} = + \quad 118.818$$

$$X_1 = -63981.852 \quad (+)$$

$$X = -64008.670$$

$$S_1 \times \text{②} = 9 \quad 111.269$$

$$Y_1 = -37561.806 \quad (+)$$

$$Y = -37441.857$$

$$Y_2 = -37621.023$$

$$Y_1 = -37561.806 \quad (-)$$

$$\Delta Y = +115.217$$

$$\text{Cos} \alpha = + \quad 183.48955 \quad \text{①}$$

$$\text{Sin} \alpha = 9 \quad 1772.647 \quad \text{②}$$

$$\text{Cos} \beta = 9 \quad 16761.705 \quad \text{③}$$

$$\text{sin} \beta = 9 \quad 17368.551 \quad \text{④}$$

$$\text{Sin}(\beta - \alpha) = - \quad 1990.551 \quad \text{⑤}$$

$$\Delta Y \times \text{①} = + \quad 118.31193$$

$$\Delta X \times \text{②} = 9 \quad 118.77667 \quad (-)$$

$$F = 118.08860$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| = 123.9159$$

$$S_2 \times \text{③} = 9 \quad 115.728$$

$$X_2 = -64241.448 \quad (+)$$

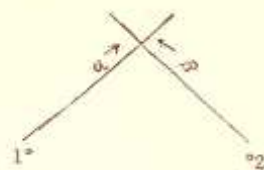
$$X = -64008.670$$

$$S_2 \times \text{④} = 9 \quad 117.466$$

$$Y_2 = -37621.023 \quad (+)$$

$$Y = -37441.857$$

算出点



$$X_2 = -$$

$$X_1 = -$$

$$\Delta X = -$$

$$\alpha =$$

$$\beta =$$

$$\beta - \alpha =$$

$$\Delta Y \times \text{③} = -$$

$$\Delta X \times \text{④} = -$$

$$E =$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| =$$

$$S_1 \times \text{①} = -$$

$$X_1 = -$$

$$X = -$$

$$S_1 \times \text{②} = -$$

$$Y_1 = -$$

$$Y = -$$

$$Y_2 = -$$

$$Y_1 = -$$

$$\Delta Y = -$$

$$\text{Cos} \alpha = -$$

$$\text{Sin} \alpha = -$$

$$\text{Cos} \beta = -$$

$$\text{sin} \beta = -$$

$$\text{Sin}(\beta - \alpha) = -$$

$$\Delta Y \times \text{①} = -$$

$$\Delta X \times \text{②} = -$$

$$F =$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| =$$

$$S_2 \times \text{③} = -$$

$$X_2 = -$$

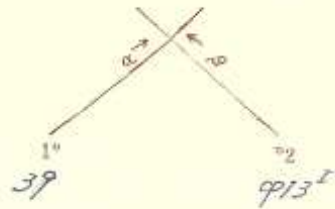
$$X = -$$

$$S_2 \times \text{④} = -$$

$$Y_2 = -$$

$$Y = -$$

算出点 44



$$\begin{aligned} 913^{\circ} X_2 &= -63521.792 \\ 39 X_1 &= -6398.948 \\ \Delta X &= -0.144.156 \end{aligned}$$

$$\begin{aligned} \alpha &= 121^{\circ} - 32' - 26'' \\ \beta &= 130^{\circ} - 57' - 43'' \\ \beta - \alpha &= 89^{\circ} - 25' - 17'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times ③ &= +128.10449 \\ \Delta X \times ④ &= +122.73888 \\ E &= 150.84337 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 150.8457$$

$$\begin{aligned} S_1 \times ① &= 9 \quad 126.597 \\ X_1 &= -6398.948 \\ X &= -6370.1851 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= +123.335 \\ Y_1 &= -3755.822 \\ Y &= -3798.577 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3788.1028 \\ Y_1 &= -3755.842 \\ \Delta Y &= -1.32.786 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.5231094 \quad ① \\ \text{Sin} \alpha &= +0.852275 \quad ② \\ \text{Cos} \beta &= +0.1857210 \quad ③ \\ \text{Sin} \beta &= +0.5741967 \quad ④ \\ \text{Sin}(\beta - \alpha) &= -0.9999955 \quad ⑤ \end{aligned}$$

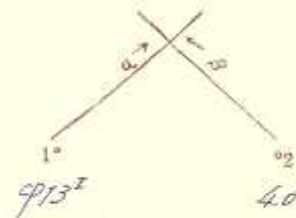
$$\begin{aligned} \Delta Y \times ① &= 0.17.15016 \\ \Delta X \times ② &= 0.137.63305 \\ F &= 120.48289 \end{aligned}$$

$$S_2 = \frac{F}{⑤} = 120.4838$$

$$\begin{aligned} S_2 \times ③ &= +117.559 \\ X_2 &= -63521.792 \\ X &= -6370.351 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= +110.5481 \\ Y_2 &= -3788.1028 \\ Y &= -3798.577 \end{aligned}$$

算出点 2



$$\begin{aligned} 40 X_2 &= -63910.140 \\ 913^{\circ} X_1 &= -63521.792 \\ \Delta X &= -1.37.348 \end{aligned}$$

$$\begin{aligned} \alpha &= 130^{\circ} - 32' - 26'' \\ \beta &= 127^{\circ} - 32' - 26'' \\ \beta - \alpha &= 190^{\circ} - 00' - 00'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times ③ &= +118.48860 \\ \Delta X \times ④ &= 9.119.59651 \\ E &= 138.02491 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 138.0249$$

$$\begin{aligned} S_1 \times ① &= +119.1891 \\ X_1 &= -63521.792 \\ X &= -6370.683 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= 9 \quad 132.608 \\ Y_1 &= -3788.1028 \\ Y &= -3755.820 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3768.1315 \\ Y_1 &= -3788.1028 \\ \Delta Y &= -2.121.693 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +0.5231094 \quad ① \\ \text{Sin} \alpha &= 0.852275 \quad ② \\ \text{Cos} \beta &= 0.1857210 \quad ③ \\ \text{Sin} \beta &= 0.5741967 \quad ④ \\ \text{Sin}(\beta - \alpha) &= -0.101111 \quad ⑤ \end{aligned}$$

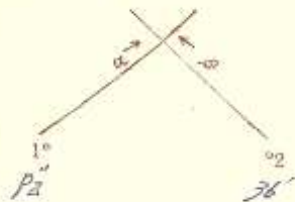
$$\begin{aligned} \Delta Y \times ① &= -0.111.70748 \\ \Delta X \times ② &= 0.131.83077 \\ F &= 120.48329 \end{aligned}$$

$$S_2 = \frac{F}{⑤} = 120.4833$$

$$\begin{aligned} S_2 \times ③ &= 9 \quad 117.457 \\ X_2 &= -63910.140 \\ X &= -6370.683 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= 9 \quad 110.1715 \\ Y_2 &= -3768.1315 \\ Y &= -3755.820 \end{aligned}$$

算出點 $4''$



$$\begin{aligned} 36' X_2 &= -644081.01622 \\ 36' X_1 &= -643991.01599 \\ \Delta X &= -1119.01023 \end{aligned}$$

$$\alpha = 1215' - 48'' - 59''$$

$$\beta = 1227' - 48'' - 48''$$

$$\beta - \alpha = 191' - 35'' - 49''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 91116.056965 \\ \Delta X \times \textcircled{4} &= 91116.056965 \\ E &= 1111.056965 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 1111.056965$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 71111.056965 \\ X_1 &= -643991.01599 (+) \\ X &= -643991.01599 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 91116.056965 \\ Y_1 &= -372771.01617 (+) \\ Y &= -372771.01617 \end{aligned}$$

$$\begin{aligned} Y_2 &= -372771.01617 \\ Y_1 &= -372771.01617 (-) \\ \Delta Y &= 11119.01708 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +0.1811810181 \textcircled{1} \\ \text{Sin} \alpha &= 0.9850661610 \textcircled{2} \\ \text{Cos} \beta &= 0.1617617051 \textcircled{3} \\ \text{Sin} \beta &= 0.9850661610 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.9991616162 \textcircled{5} \end{aligned}$$

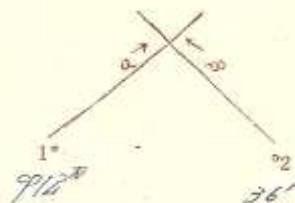
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 71111.056965 \\ \Delta X \times \textcircled{2} &= 91116.056965 (-) \\ F &= 1111.056965 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 1111.056965$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 91116.056965 \\ X_2 &= -644081.01622 (+) \\ X &= -644081.01622 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 91116.056965 \\ Y_2 &= -372771.01617 (+) \\ Y &= -372771.01617 \end{aligned}$$

算出點 $22''$



$$\begin{aligned} 36' X_2 &= -644081.01622 \\ 412'' X_1 &= -644561.03220 (-) \\ \Delta X &= -2154.02598 \end{aligned}$$

$$\alpha = 148' - 58'' - 21''$$

$$\beta = 147' - 44'' - 48''$$

$$\beta - \alpha = 182' - 30'' - 27''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 91116.056965 \\ \Delta X \times \textcircled{4} &= 2154.02598 (-) \\ E &= 1111.056965 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 1111.056965$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 01111.056965 \\ X_1 &= -644561.03220 (+) \\ X &= -644266.01622 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 71111.056965 \\ Y_1 &= -372771.01617 (+) \\ Y &= -372771.01617 \end{aligned}$$

$$\begin{aligned} Y_2 &= -372771.01617 \\ Y_1 &= -372771.01617 (-) \\ \Delta Y &= 91116.056965 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.1811810181 \textcircled{1} \\ \text{Sin} \alpha &= +0.9850661610 \textcircled{2} \\ \text{Cos} \beta &= +0.1617617051 \textcircled{3} \\ \text{Sin} \beta &= +0.9850661610 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.9991616162 \textcircled{5} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= 71111.056965 \\ \Delta X \times \textcircled{2} &= 91116.056965 (-) \\ F &= 1111.056965 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 1111.056965$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +11111.056965 \\ X_2 &= -644081.01622 (+) \\ X &= -644266.01622 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +91116.056965 \\ Y_2 &= -372771.01617 (+) \\ Y &= -372771.01617 \end{aligned}$$

$X_2 = 164220 \cdot 1179$ $Y_2 = 137224 \cdot 1965$
 $X_1 = 164114 \cdot 0179$ $Y_1 = 137224 \cdot 1965$
 $\Delta X = 106 \cdot 0999$ $\Delta Y = 0$

$\text{Log} \Delta Y \quad | \cdot | | | | | | |$
 $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logtan} B \quad | \cdot | 567997$
 $B \quad | 90^\circ - 45 - 45$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$ $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logsin} B \quad | \cdot | | | | | | |$ $\text{Logcos} B \quad | \cdot | | | | | | |$
 $\text{Log} D \quad | \cdot | 80527$ $\text{Log} D \quad | \cdot | 876977$
 $\Delta x_2 = | | | | \cdot | | | | |$
 $\Delta y_2 = | | | | \cdot | | | | |$
 $D_2 = 108 \cdot 427$ 距離 = $108 \text{K} 427$
 $D = | | | | \text{K} | | |$ 方位角 $a = 331 - 16 - 45$

$X_2 = | | | | \cdot | | | |$ $Y_2 = | | | | \cdot | | | |$
 $X_1 = | | | | \cdot | | | |$ $Y_1 = | | | | \cdot | | | |$
 $\Delta X = - - | | | | \cdot | | | |$ $\Delta y = - - | | | | \cdot | | | |$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$
 $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logtan} B \quad | \cdot | | | | | | |$
 $B \quad | | |^\circ - | | | - | | "$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$ $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logsin} B \quad | \cdot | | | | | | |$ $\text{Logcos} B \quad | \cdot | | | | | | |$
 $\text{Log} D \quad | \cdot | | | | | | |$ $\text{Log} D \quad | \cdot | | | | | | |$
 $\Delta x_2 = | | | | \cdot | | | | |$
 $\Delta y_2 = | | | | \cdot | | | | |$
 $D_2 = | | | | \cdot | | | | |$ 距離 = $| | | \text{K} | | |$
 $D = | | | | \text{K} | | |$ 方位角 $a = | | |^\circ - | | | - | | "$

$X_2 = 164220 \cdot 1438$ $Y_2 = 137224 \cdot 1965$
 $X_1 = 164114 \cdot 0179$ $Y_1 = 137224 \cdot 1965$
 $\Delta X = 106 \cdot 1059$ $\Delta Y = 0$

$\text{Log} \Delta Y \quad | \cdot | | | | | | |$
 $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logtan} B \quad | \cdot | 579160$
 $B \quad | 90^\circ - 44 - 57$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$ $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logsin} B \quad | \cdot | | | | | | |$ $\text{Logcos} B \quad | \cdot | | | | | | |$
 $\text{Log} D \quad | \cdot | 80163$ $\text{Log} D \quad | \cdot | 865353$
 $\Delta x_2 = | | | | \cdot | | | | |$
 $\Delta y_2 = | | | | \cdot | | | | |$
 $D_2 = 100 \cdot 163$ 距離 = $100 \text{K} 163$
 $D = | | | | \text{K} | | |$ 方位角 $a = 339 - 55 - 43$

$X_2 = | | | | \cdot | | | |$ $Y_2 = | | | | \cdot | | | |$
 $X_1 = | | | | \cdot | | | |$ $Y_1 = | | | | \cdot | | | |$
 $\Delta X = - - | | | | \cdot | | | |$ $\Delta y = - - | | | | \cdot | | | |$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$
 $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logtan} B \quad | \cdot | | | | | | |$
 $B \quad | | |^\circ - | | | - | | "$

$\text{Log} \Delta y \quad | \cdot | | | | | | |$ $\text{Log} \Delta X \quad | \cdot | | | | | | |$
 $\text{Logsin} B \quad | \cdot | | | | | | |$ $\text{Logcos} B \quad | \cdot | | | | | | |$
 $\text{Log} D \quad | \cdot | | | | | | |$ $\text{Log} D \quad | \cdot | | | | | | |$
 $\Delta x_2 = | | | | \cdot | | | | |$
 $\Delta y_2 = | | | | \cdot | | | | |$
 $D_2 = | | | | \cdot | | | | |$ 距離 = $| | | \text{K} | | |$
 $D = | | | | \text{K} | | |$ 方位角 $a = | | |^\circ - | | | - | | "$

ΔX	ΔY	B, 在 a 象限	Xヲ田スニハ
+	+	I	B
-	+	II	$180^\circ - B$
-	-	III	$180^\circ + B$
+	-	IV	$360^\circ - B$

隅切辺長及面積計算用紙

点名	11. 12. 15. 16		11 ①		16 ③		15 ③	
	°	'	°	'	°	'	°	'
α (X)	71	35	38	71	35	38	71	35
α' (Y)	167	13	38	165	56	41	165	56
A	84	22	00	95	38	00	94	21
$\frac{A}{2}$	42	11	00	47	49	00	47	10
$\frac{a}{2}$			1500			1500		1500
① $\sin \frac{A}{2}$	9	827049		9	869818		9	865365
② $\frac{a}{2}$	0	176091		0	176091		0	176091
③ $\tan \frac{A}{2}$	9	957231						
$b = (\text{②} + \text{①})$	0	349062		0	206273		0	242729
$c = (\text{②} + \text{③})$	0	218860						
b		2224			2024			2045
c		1655						
$\frac{a}{2} - c =$		2687						

757

671505

点名	7 8 10 19		7 ①		19 ③		18 ③	
	°	'	°	'	°	'	°	'
α (X)	61	54	21	61	54	21	61	54
α' (Y)	158	39	46	152	56	59	165	56
A	83	14	37	91	02	38	106	02
$\frac{A}{2}$	41	37	18	45	31	19	52	01
$\frac{a}{2}$			1500			1500		1500
① $\sin \frac{A}{2}$		664209			713519			700220
② $\frac{a}{2}$								
③ $\tan \frac{A}{2}$								
$b = (\text{②} + \text{①})$								
$c = (\text{②} + \text{③})$								
b		2258			2102			1903
c								
$\frac{a}{2} - c =$								

闊切邊長及面積計算用紙

點名	4.5 27 22		4		28		27			
	5	1	4	0	28	0	27	0		
α (X)	47	24	48	48	47	24	48	47	24	26
α' (Y)	135	48	59	18	130	06	18	144	54	21
A	91	35	69	82	41	30	27	97	29	57
$\frac{A}{2}$	45	47	34	41	20	45	14	48	44	59
$\frac{a}{2}$	1500		1500		1500		1500		1500	
① $\sin \frac{A}{2}$	716890		660602		659397		751837			
② $\frac{a}{2}$										
③ $\tan \frac{A}{2}$										
$b = (① + ②)$										
$c = (① + ③)$										
b	4092		2271		2275		1985			
c										
$\frac{a}{2} c =$										

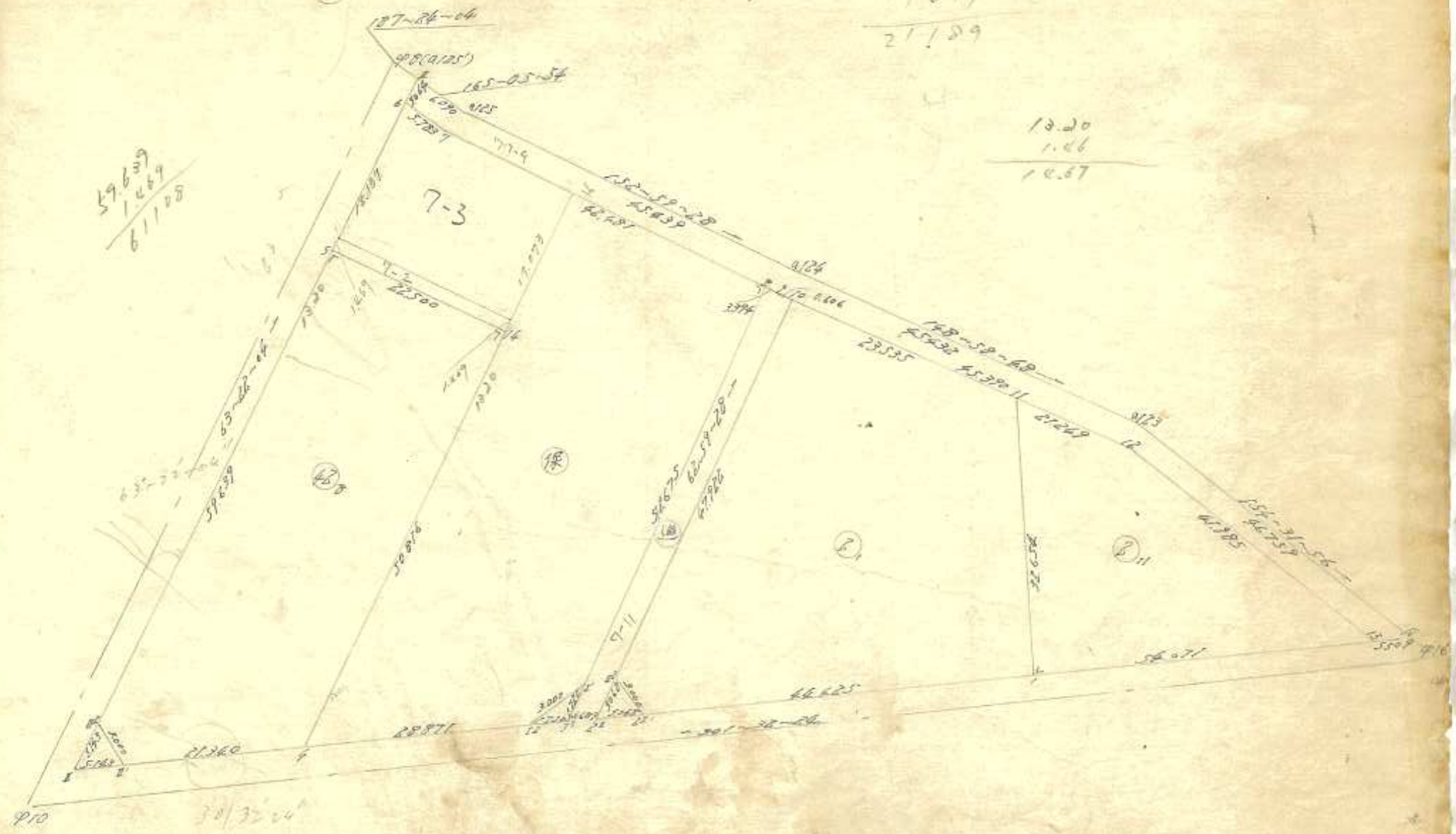
點名	I		II		III		III	
	0	0	0	0	0	0	0	0
α (X)								
α' (Y)								
A								
$\frac{A}{2}$								
$\frac{a}{2}$								
① $\sin \frac{A}{2}$								
② $\frac{a}{2}$								
③ $\tan \frac{A}{2}$								
$b = (① + ②)$								
$c = (① + ③)$								
b								
c								
$\frac{a}{2} c =$								

7卷

54.216
 1.467
52.749
 31.049
 21.700

13.20
 1.46
14.66

59.633
 1.469
61.102



7

7-3

10

11

12

13

14

P10

30/32/24

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
7 筆番号 ④	9 ¹⁰	6,393.798	-	0	31,729.3825.487	-	0	63,526	/	5,020.532	/	815.340
	5	6,400.532	-	0	6,621.3879.009	-	0	63,398	/	7,641.488	/	523.119
	16	6,400.419	-	+	42,892.3889.495	-	+	36,339	3,548.707	/	3,821.463	/
	4	6,377.640	-	+	11,616.3843.670	-	+	63,612	49,38.836	/	507.271	/
	9 ¹⁰	6,388.803	-	0	16,158.3825.483	-	+	17,973	15,96.056	/	/	411.754

控除シタル値

X=於テ 6,300
y=於テ 2,800

$$\bar{x} = \frac{10083.599}{12} = 840.299$$

$$\bar{y} = \frac{2578.521}{12} = 214.867$$

$$S = 1289.260$$

390.00cf 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑤	3 ¹⁰	6,362.538	-	0	16,221.3868.277	-	+	1,27,605	17,26.361	/	10,39.244
	4	6,377.640	-	0	37,081.3843.670	-	0	20,818	/	16,15.370	1,654.263
	16	6,400.419	-	0	42,892.3889.495	-	0	36,339	3,548.707	/	3,821.463
	5	6,400.532	-	0	28,902.3879.009	-	0	7,440	/	8,96.758	2,283.518
	6	6,409.321	-	0	3,201.3896.535	-	0	19,013	/	8,458.780	3,091.009
	7	6,423.733	-	+	43,435.3898.002	-	0	20,779	/	2,571.048	4,257.586
	8	6,385.886	-	+	21,314.3917.314	-	+	26,747	2,297.193	/	7,192.991
	3 ⁵	6,362.419	-	+	23,348.3871.275	-	+	49,037	3,060.841	/	1,664.129

控除シタル値

X=於テ 6,300
y=於テ 2,800

$$\bar{x} = \frac{7604.395}{12} = 633.696$$

$$\bar{y} = \frac{4007.208}{12} = 333.933$$

$$S = 2,003.604$$

606.09cf 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
7 筆番号 ②	2 ¹⁰	6360'578	-	⊖ 24'761	3876'472	-	⊖ 42'814		2593'586		1893'523
	10	6382'341	-	⊖ 1'594	3919'162	-	⊖ 54'824		4514'263		1189'954
	11	6362'172	-	⊕ 47'999	3931'296	-	⊕ 4'953	307'938		6302'077	
	1	6334'342	-	⊕ 4'592	3914'215	-	⊕ 54'942	1886'818		524'475	
	2 ¹¹	6357'580	-	⊖ 26'226	3876'354	-	⊕ 37'743	2173'242			2003'224

控除シクル値

X = 於テ 6300

y = 於テ 3800

$$\bar{Z} = \frac{4367998}{7} = 623999.714$$

$$2S = \frac{2739851}{2} = 1369925.5$$

$$S = 1369925.5$$

$$414409 \text{ 坪} \quad \text{年} \quad \text{月} \quad \text{日}$$

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	1	6334'342	-	⊕ 9'420	3914'215	-	⊕ 28'031	169'784		580'086	
	11	6362'172	-	⊖ 56'115	3931'296	-	⊕ 29'004	996'655		797'675	
	12	6343'962	-	⊖ 9'420	3942'246	-	⊖ 28'031	1742'743		301'068	
	13	6306'057	-	⊕ 56'115	3960'300	-	⊖ 29'004	1275'074	2370'694		

控除シクル値

X = 於テ 6300

y = 於テ 3900

$$\bar{Z} = \frac{1165839}{4} = 291459.75$$

$$2S = \frac{1851978}{2} = 925989$$

$$S = 925989$$

$$28011 \text{ 坪} \quad \text{年} \quad \text{月} \quad \text{日}$$

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)			
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-		
筆番号 ⑧	13	6306.057	-	0	40.786	3960.360	-	+ 22.748	137.785	,	,	2867.256	
	12	6343.962	-	0	76.803	3948.246	-	+ 41.444	1021.961	,	,	4018.650	
	9	6382.860	-	0	79.771	3918.856	-	+ 44.224	3664.401	,	,	2301.872	
	7	6423.733	-	0	46.461	3898.922	-	+ 22.321	2761.846	,	,	372.710	
	6	6469.321	-	0	6.961	3876.535	-	0	1.252	161.910	,	45.490	
	998 ^ア	6430.694	-	+	4.512	3892.274	-	0	4.305	562.638	41.864	,	
	9125	6424.809	-	+	46.368	3900.840	-	0	12.201	2770.885	502.629	,	
	9124	6386.326	-	+	79.418	3921.475	-	0	44.048	3714.392	2499.682	,	
	9123	6365.391	-	+	81.150	3944.888	-	0	43.519	1975.371	4454.161	,	
	控除シタル値							$\Sigma =$					
	X = 於テ							$\Sigma S =$					
	y = 於テ							$S =$					

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 916 ^ア	6303.176	-	7	39.336	3964.994	-	0	15.412	48.949	2949.814	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	,	-	,	,	,	-	,	,	,	,	,	
	控除シタル値							$\Sigma =$				
	X = 於テ 6300							$\Sigma S =$				
y = 於テ 3890							$S =$					

128.28^ア 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 ⑤	3 ²⁴	6.362' 538	-	⊖ 4.839	2868' 277	-	+	5' 079	317' 631		330' 372	
	3 ²⁵	6.362' 419	-	⊖ 23.348	2871' 275	-	⊖	49' 037		3060' 841	1664' 129	
	8	6.385' 886	-	⊖ 20.441	2917' 314	-	⊖	47' 581		4086' 542	2398' 015	
	9	6.382' 860	-	+	3' 645	2918' 856	-	⊖	1' 254		153' 622	421' 365
	10	6.382' 341	-	+	22.282	2919' 168	-	+	42' 384	3489' 941		2655' 301
	2 ²⁶	6.360' 578	-	+	24.761	2876' 472	-	+	42' 819	2593' 586		1893' 523
	2 ²⁷	6.357' 580	-	⊖	1' 960	2876' 254	-	+	8' 195	471' 868		149' 654

控除シクル値

X = 於テ 6.200

y = 於テ 2.800

$\Sigma = 6873.026$ 7301.005 4970.169 4542.190

$\Sigma S = 427.979$

427.979

S = 213.989

54.73 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号											

控除シクル値

X = 於テ

y = 於テ

M =

$\Sigma S =$

S =

年 月 日

多角点計算用紙

測量No. _____



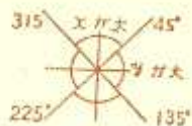
測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E. (+)	W (-)	X	Y	
	916 ^N											6303.176	3964.994	916 ^N
916 ^N	13			301 26 44	5.509	523077	852285					6306.257	3960.300	13
13	1	104 005			54.071							6324.342	3914.215	1
1	2 ^E				44.425							6357.580	3876.254	2 ^E
2 ^E	2 ^E				3.068							6359.185	3873.739	2 ^E
2 ^E	3 ^E				4.689							6361.638	3869.743	3 ^E
3 ^E	3 ^E				1.720							6362.538	3868.277	3 ^E
3 ^E	4		50211		28.871							6377.660	3843.670	4
4	910 ^E				21.360							6388.803	3825.483	910 ^E
910 ^E	910 ^E				5.143							6391.493	3825.100	910 ^E
910 ^E	910 ^E			63 22 44	5.143	448279	893894					6393.798	3825.697	910 ^E
910 ^E	5				59.639							6420.532	3879.009	5
5	6	82309			19.606							6429.721	3896.525	6
6	908 ^E				7.064							6430.696	3898.274	908 ^E
908 ^E	0125			165 05 56	6.090	275180	966364					6426.809	3900.840	0125
0125	0124			152 59 28	45.439	454120	890960					6384.326	3925.475	0124
0124	0123			148 58 42	45.432	515329	856992					6345.391	3966.888	0123
0123	916 ^N			154 31 56	46.759	429986	902826					6303.176	3964.994	916 ^N

協和建設測量

7

多角点計算用紙

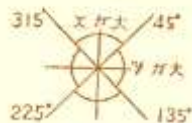
測量No.



象限	I	+	+	+
	II	-	+	+
	III	-	-	-
	IV	+	-	-

測点	観点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N(+)	S(-)	E(+)	W(-)	X	Y	
	0125	"	"	"	.									
0125	0125'			255°55'	3.000	257180	966364		776		2.899	6426037	3897961	0125'
	0126				.									
0124	0124'			332°59'28"	20.000	654120	890960	17.819			9.082	6402145	3912393	0124'
0124'	0124''			342°59'28"	3.000	"	"		1.362		2.673	6400783	3909720	0124''
	0123				.									
0123	0123'			328°58'48"	20.000	515229	856992	17.140			10.307	6362531	3934581	0123'
0123'	0123''			238°58'48"	3.000	"	"		1.546		2.571	6360985	3932010	0123''
	0122				.									
0122	0122'			334°31'56"	50.000	629986	902836	45.142			21.499	6322966	3955570	0122'
0122'	0122''			264°31'56"	3.000	"	"		1.290		2.709	6321676	3952861	0122''
	016				.									
016	1			301°32'24"	59.580	523094	852275	31.166			50.779	6324342	3946215	1

(7)



象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

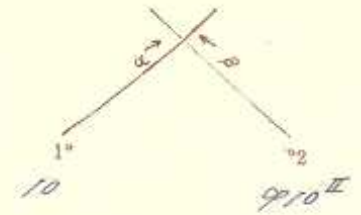
多角点計算用紙

測量No.

測点	視点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	Cos	N(+)	S(-)	E(+)	W(-)	X	Y	
	11											6362.172	3731.296	11
11	10			328.5848	23.535	515337	856987	20.169			12.128	6382.341	3719.168	10
10	10'			62.5928	10.000	454120	890940		4.541		8.909	6377.800	3710.259	10'
10'	10 ²			332.5928	4.000			3.564			1.816	6381.364	3708.443	10 ²
	910 ²											6395.639	3821.100	910 ²
910 ²	5			63.2204	64.782	448262	892902	29.039		5.7909		6420.532	3879.009	5
5	14			153.2204	22.500				20.113	10.086		6400.419	3889.095	14
	2 ²											6359.185	3872.729	2 ²
2 ²	2 ² '			121.3224	3.068	522094	852275		1.605	2.615		6357.580	3876.254	2 ² '
	2 ² ²			62.5928	3.068	454120	890940	1.393		2.733		6360.578	3876.472	2 ² ²
	3 ¹											6361.638	3868.743	3 ¹
3 ¹	3 ¹ '			62.5928	1.720	454120	890940	.781		1.532		6362.419	3871.275	3 ¹ '
	3 ¹ ²			301.3224	1.720	522094	852275	.900			1.466	6362.538	3868.277	3 ¹ ²

路線交叉點座標及距離計算用紙

算出點	1 ^{II}
-----	-----------------



$$\begin{aligned} 9910^{\text{II}} X_2 &= -61911.4693 \\ 10 X_1 &= -61911.4693 \\ \Delta X &= -11191.4693 \end{aligned}$$

$$\alpha = 122^\circ - 56' - 28''$$

$$\beta = 122^\circ - 56' - 28''$$

$$\beta - \alpha = 122^\circ - 56' - 28''$$

$$\begin{aligned} Y_2 &= -29821.11010 \\ Y_1 &= -29821.11010 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0.45961799 \quad \text{①} \\ \sin \alpha &= 0.88909316 \quad \text{②} \\ \cos \beta &= 0.45961799 \quad \text{③} \\ \sin \beta &= 0.88909316 \quad \text{④} \\ \sin(\beta - \alpha) &= -0.88909316 \quad \text{⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +11191.4693 \\ \Delta X \times \text{④} &= +11191.4693 \\ E &= 11191.4693 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 11191.4693$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -61911.4693 \\ X &= -61911.4693 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -29821.11010 \\ Y &= -29821.11010 \end{aligned}$$

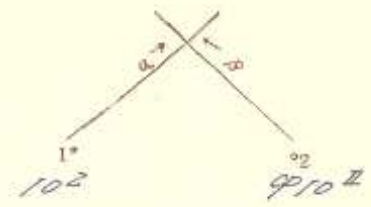
$$\begin{aligned} \Delta Y \times \text{①} &= +11191.4693 \\ \Delta X \times \text{②} &= 0 \\ F &= 11191.4693 \end{aligned}$$

$$S_2 = \frac{F}{\text{③}} = 11191.4693$$

$$\begin{aligned} S_2 \times \text{③} &= 0 \\ X_2 &= -61911.4693 \\ X &= -61911.4693 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 7 \\ Y_2 &= -29821.11010 \\ Y &= -29821.11010 \end{aligned}$$

算出點	2 ^I
-----	----------------



$$\begin{aligned} 9910^{\text{I}} X_2 &= -61911.4693 \\ 102 X_1 &= -61911.4693 \\ \Delta X &= -11191.4693 \end{aligned}$$

$$\alpha = 122^\circ - 56' - 28''$$

$$\beta = 122^\circ - 56' - 28''$$

$$\beta - \alpha = 122^\circ - 56' - 28''$$

$$\begin{aligned} \Delta Y \times \text{③} &= +11191.4693 \\ \Delta X \times \text{④} &= +11191.4693 \\ E &= 11191.4693 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 11191.4693$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -61911.4693 \\ X &= -61911.4693 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -29821.11010 \\ Y &= -29821.11010 \end{aligned}$$

$$\begin{aligned} Y_2 &= -29821.11010 \\ Y_1 &= -29821.11010 \\ \Delta Y &= 0 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0.45961799 \quad \text{①} \\ \sin \alpha &= 0.88909316 \quad \text{②} \\ \cos \beta &= 0.45961799 \quad \text{③} \\ \sin \beta &= 0.88909316 \quad \text{④} \\ \sin(\beta - \alpha) &= -0.88909316 \quad \text{⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +11191.4693 \\ \Delta X \times \text{②} &= 0 \\ F &= 11191.4693 \end{aligned}$$

$$S_2 = \frac{F}{\text{③}} = 11191.4693$$

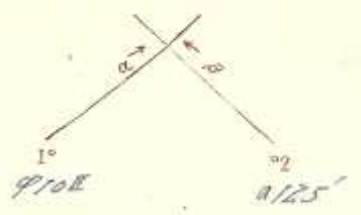
$$\begin{aligned} S_2 \times \text{③} &= 0 \\ X_2 &= -61911.4693 \\ X &= -61911.4693 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 7 \\ Y_2 &= -29821.11010 \\ Y &= -29821.11010 \end{aligned}$$

7

路線交叉点座標及距離計算用紙

算出点 6



$$\begin{aligned} 4125^\circ X_2 &= -64274.07317 \\ 410^\circ X_1 &= -64291.0493 \\ \Delta X &= +1176.05644 \end{aligned}$$

$$\begin{aligned} \alpha &= 63^\circ - 20' - 64'' \\ \beta &= 345^\circ - 25' - 54'' \\ \beta - \alpha &= 281^\circ - 43' - 58'' \end{aligned}$$

$$\begin{aligned} Y_2 &= -38997.1941 \\ Y_1 &= -38921.17010 \\ \Delta Y &= +76.0240 \\ \text{Cos } \alpha &= +.468261 \text{ ①} \\ \text{Sin } \alpha &= +.883906 \text{ ②} \\ \text{Cos } \beta &= +.1966369 \text{ ③} \\ \text{Sin } \beta &= 0.257761 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.1979115 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{⑤} &= +1176.025676 \\ \Delta X \times \text{④} &= 9118.56905 \\ E &= 182.66581 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +1176.44490 \\ \Delta X \times \text{③} &= +1179.09115 \\ F &= 1151.92925 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 184.07883$$

$$S_2 = \frac{F}{\text{④}} = 1151.46178$$

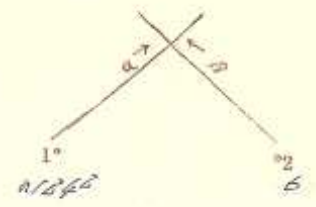
$$\begin{aligned} S_1 \times \text{①} &= +1176.05644 \\ X_1 &= -64291.0493 \\ X &= -64279.07317 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= +1151.46178 \\ X_2 &= -64274.07317 \\ X &= -64279.07317 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= +76.0240 \\ Y_1 &= -38921.17010 \\ Y &= -38966.05925 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0.257761 \\ Y_2 &= -38997.1941 \\ Y &= -38966.05925 \end{aligned}$$

算出点 7



$$\begin{aligned} 4125^\circ X_2 &= -64279.07317 \\ 4184^\circ X_1 &= -64010.1783 \\ \Delta X &= +1268.05487 \end{aligned}$$

$$\begin{aligned} \alpha &= 138^\circ - 58' - 28'' \\ \beta &= 128^\circ - 25' - 54'' \\ \beta - \alpha &= 120^\circ - 66' - 28'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1176.025676 \\ \Delta X \times \text{④} &= +1177.03886 \\ E &= 1151.46178 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1251.75589$$

$$\begin{aligned} S_1 \times \text{①} &= +1268.05487 \\ X_1 &= -64010.1783 \\ X &= -64279.07317 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0.883906 \\ Y_1 &= -38909.17220 \\ Y &= -38966.05925 \end{aligned}$$

$$\begin{aligned} Y_2 &= -38966.05925 \\ Y_1 &= -38909.17220 \\ \Delta Y &= 56.88705 \end{aligned}$$

$$\begin{aligned} \text{Cos } \alpha &= +.1896019316 \text{ ①} \\ \text{Sin } \alpha &= 0.45741619 \text{ ②} \\ \text{Cos } \beta &= 0.1966369 \text{ ③} \\ \text{Sin } \beta &= +.257761 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.1979115 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= 0.1111.74699 \\ \Delta X \times \text{②} &= 0.1177.195993 \\ F &= 1151.46178 \end{aligned}$$

$$S_2 = \frac{F}{\text{④}} = 1151.78930$$

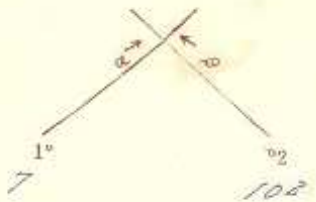
$$\begin{aligned} S_2 \times \text{③} &= 0.1151.46178 \\ X_2 &= -64279.07317 \\ X &= -64279.07317 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= +56.88705 \\ Y_2 &= -38966.05925 \\ Y &= -38966.05925 \end{aligned}$$

7

路線交叉点座標及距離計算用紙

算出点	8
-----	---



$$100 X_2 = -6381.1364$$

$$X_1 = -6467.1733$$

$$\Delta X = -0142.0369$$

$$\alpha = 152^\circ - 56' - 28''$$

$$\beta = 162^\circ - 56' - 28''$$

$$\beta - \alpha = 10^\circ - 00' - 00''$$

$$Y_2 = -3908.443$$

$$Y_1 = -3898.624$$

$$\Delta Y = +1101.429$$

$$\text{Cos } \alpha = 0.18910936 \quad \textcircled{1}$$

$$\text{Sin } \alpha = 7.4561189 \quad \textcircled{2}$$

$$\text{Cos } \beta = 7.4561189 \quad \textcircled{3}$$

$$\text{Sin } \beta = 7.4561189 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = -1.0111111 \quad \textcircled{5}$$

$$\Delta Y \times \textcircled{3} = 7114.2228$$

$$\Delta X \times \textcircled{1} = 0142.0369$$

$$E = 142.0369$$

$$S_1 = \frac{E}{\textcircled{5}} = 42.0369$$

$$S_1 \times \textcircled{1} = 0142.0369$$

$$X_1 = -6467.1733$$

$$X = -6381.1364$$

$$S_1 \times \textcircled{2} = 7114.2228$$

$$Y_1 = -3898.624$$

$$Y = -3908.443$$

$$\Delta Y \times \textcircled{1} = 0119.2228$$

$$\Delta X \times \textcircled{2} = 0142.0369$$

$$F = 119.2228$$

$$S_2 = \frac{F}{\textcircled{5}} = 19.2228$$

$$S_2 \times \textcircled{3} = 7114.2228$$

$$X_2 = -6381.1364$$

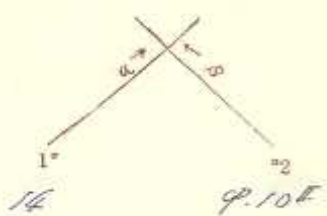
$$X = -6381.1364$$

$$S_2 \times \textcircled{4} = 7114.2228$$

$$Y_2 = -3908.443$$

$$Y = -3908.443$$

算出点	4
-----	---



$$9.105 X_2 = -6391.443$$

$$X_1 = -6400.443$$

$$\Delta X = -711.819$$

$$\alpha = 243^\circ - 56' - 28''$$

$$\beta = 162^\circ - 56' - 28''$$

$$\beta - \alpha = 10^\circ - 00' - 00''$$

$$\Delta Y \times \textcircled{3} = 7114.2228$$

$$\Delta X \times \textcircled{1} = 0119.2228$$

$$E = 119.2228$$

$$S_1 = \frac{E}{\textcircled{5}} = 19.2228$$

$$S_1 \times \textcircled{1} = 0119.2228$$

$$X_1 = -6400.443$$

$$X = -6391.443$$

$$S_1 \times \textcircled{2} = 7114.2228$$

$$Y_1 = -3898.624$$

$$Y = -3898.624$$

$$Y_2 = -3908.443$$

$$Y_1 = -3898.624$$

$$\Delta Y = -101.819$$

$$\text{Cos } \alpha = 7.4561189 \quad \textcircled{1}$$

$$\text{Sin } \alpha = 0.18910936 \quad \textcircled{2}$$

$$\text{Cos } \beta = 0.18910936 \quad \textcircled{3}$$

$$\text{Sin } \beta = 7.4561189 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = -1.0111111 \quad \textcircled{5}$$

$$\Delta Y \times \textcircled{1} = 7114.2228$$

$$\Delta X \times \textcircled{2} = 0119.2228$$

$$F = 119.2228$$

$$S_2 = \frac{F}{\textcircled{5}} = 19.2228$$

$$S_2 \times \textcircled{3} = 7114.2228$$

$$X_2 = -6381.1364$$

$$X = -6381.1364$$

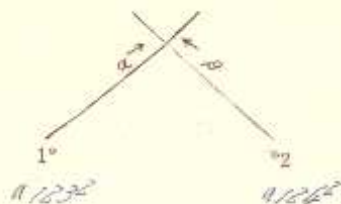
$$S_2 \times \textcircled{4} = 7114.2228$$

$$Y_2 = -3908.443$$

$$Y = -3908.443$$

(7)

算出点 9



$$\begin{aligned} \frac{11234}{11264} X_0 &= - \frac{616101.17183}{11264} \\ \frac{11234}{11264} X_1 &= - \frac{613161.1985}{11264} \\ \Delta X &= -1129.7198 \end{aligned}$$

$$\alpha = 92.8^\circ - 5.4' - 4.8''$$

$$\beta = 102^\circ - 5.4' - 5.8''$$

$$\beta - \alpha = 10^\circ - 0.4' - 1.0''$$

$$\begin{aligned} Y_2 &= -39019.1760 \\ Y_1 &= -39361.6110 \\ \Delta Y &= 342.4350 \end{aligned}$$

$$\text{Cos } \alpha = + \cdot 0.696987 \quad \textcircled{1}$$

$$\text{Sin } \alpha = 0 \cdot 0.717577 \quad \textcircled{2}$$

$$\text{Cos } \beta = 0 \cdot 0.696987 \quad \textcircled{3}$$

$$\text{Sin } \beta = + \cdot 0.717577 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 0.166995 \quad \textcircled{5}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +1129.7198 \cdot 0.696987 \\ \Delta X \times \textcircled{4} &= +1129.7198 \cdot 0.717577 \\ E &= 1111.7811 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 66.51258$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1129.7198 \cdot 0.696987 \\ X_1 &= - \frac{616601.1985}{11264} (+) \\ X &= - \frac{613661.1985}{11264} \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 \cdot 1129.7198 \cdot 0.717577 \\ Y_1 &= - \frac{39361.6110}{11264} (+) \\ Y &= - \frac{39019.1760}{11264} \end{aligned}$$

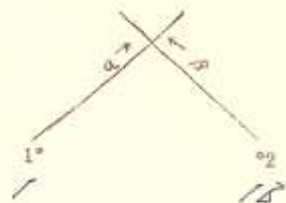
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0 \cdot 1129.7198 \cdot 0.696987 \\ \Delta X \times \textcircled{3} &= -1129.7198 \cdot 0.696987 \\ F &= 1111.7811 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 66.51258$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \cdot 1129.7198 \cdot 0.696987 \\ X_2 &= - \frac{616601.17183}{11264} (+) \\ X &= - \frac{613661.1985}{11264} \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +1129.7198 \cdot 0.717577 \\ Y_2 &= - \frac{39019.1760}{11264} (+) \\ Y &= - \frac{39361.6110}{11264} \end{aligned}$$

算出点 11



$$\begin{aligned} \frac{11}{11} X_0 &= - \frac{613661.1985}{11} \\ \frac{1}{11} X_1 &= - \frac{613661.1985}{11} \\ \Delta X &= -1119.6620 \end{aligned}$$

$$\alpha = 1.91^\circ - 5.4' - 4.8''$$

$$\beta = 122.8^\circ - 5.4' - 4.8''$$

$$\beta - \alpha = 120.9^\circ - 0.4' - 0.4''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +1119.6620 \cdot 0.696987 \\ \Delta X \times \textcircled{4} &= 0 \cdot 1119.6620 \cdot 0.717577 \\ E &= 1119.6620 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 66.51258$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1119.6620 \cdot 0.696987 \\ X_1 &= - \frac{613661.1985}{11} (+) \\ X &= - \frac{613661.1985}{11} \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1119.6620 \cdot 0.717577 \\ Y_1 &= - \frac{39361.6110}{11} (+) \\ Y &= - \frac{39361.6110}{11} \end{aligned}$$

$$\begin{aligned} Y_2 &= -39361.6110 \\ Y_1 &= -39361.6110 \\ \Delta Y &= 0 \end{aligned}$$

$$\text{Cos } \alpha = + \cdot 0.696987 \quad \textcircled{1}$$

$$\text{Sin } \alpha = + \cdot 0.717577 \quad \textcircled{2}$$

$$\text{Cos } \beta = + \cdot 0.696987 \quad \textcircled{3}$$

$$\text{Sin } \beta = 0 \cdot 0.717577 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 0.166995 \quad \textcircled{5}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1119.6620 \cdot 0.696987 \\ \Delta X \times \textcircled{2} &= +1119.6620 \cdot 0.717577 \\ F &= 1119.6620 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 66.51258$$

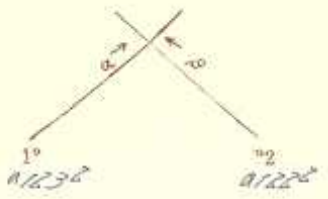
$$\begin{aligned} S_2 \times \textcircled{3} &= +1119.6620 \cdot 0.696987 \\ X_2 &= - \frac{613661.1985}{11} (+) \\ X &= - \frac{613661.1985}{11} \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \cdot 1119.6620 \cdot 0.717577 \\ Y_2 &= - \frac{39361.6110}{11} (+) \\ Y &= - \frac{39361.6110}{11} \end{aligned}$$

(7)

路線交叉點座標及距離計算用紙

算出點 12



$$\begin{aligned} 112.36^\circ X_2 &= -6321.6176 \\ 112.24^\circ X_1 &= -6360.1985 \\ \Delta X &= 2 - 1129.3109 \end{aligned}$$

$$\begin{aligned} \alpha &= 148^\circ - 58' - 48'' \\ \beta &= 294^\circ - 51' - 56'' \\ \beta - \alpha &= 146^\circ - 53' - 08'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 7 \quad | \quad 118.82295 \\ \Delta X \times \textcircled{4} &= 7 \quad | \quad 161.90099 \\ E &= 111.92196 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 119.19636$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \quad | \quad 117.1023 \\ X_1 &= -6360.1985 (+) \\ X &= -6343.9662 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 7 \quad | \quad 110.8236 \\ Y_1 &= -3932.6110 (+) \\ Y &= -3942.2446 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3952.861 \\ Y_1 &= -3932.6110 \\ \Delta Y &= 7 - 1120.851 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.1856987 \quad \textcircled{1} \\ \text{Sin} \alpha &= 7.515337 \quad \textcircled{2} \\ \text{Cos} \beta &= 7.1902927 \quad \textcircled{3} \\ \text{sin} \beta &= 0.4310013 \quad \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.6196759 \quad \textcircled{5} \end{aligned}$$

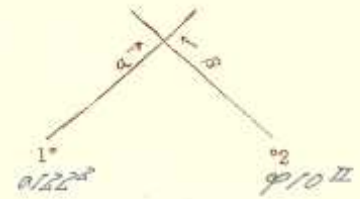
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0 \quad | \quad 117.86906 \\ \Delta X \times \textcircled{2} &= 0 \quad | \quad 80.25738 \\ F &= 112.38834 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 124.6849$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 7 \quad | \quad 122.286 \\ X_2 &= -6321.6176 (+) \\ X &= -6343.9662 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \quad | \quad 110.615 \\ Y_2 &= -3952.861 (+) \\ Y &= -3942.2446 \end{aligned}$$

算出點 13



$$\begin{aligned} 99.10^\circ X_2 &= -6391.6193 \\ 112.24^\circ X_1 &= -6321.6176 \\ \Delta X &= 7 - 169.8117 \end{aligned}$$

$$\begin{aligned} \alpha &= 154^\circ - 51' - 56'' \\ \beta &= 181^\circ - 58' - 24'' \\ \beta - \alpha &= 147^\circ - 06' - 28'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 7 \quad | \quad 168.19229 \\ \Delta X \times \textcircled{4} &= 7 \quad | \quad 159.50328 \\ E &= 119.42011 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 117.29997$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 0 \quad | \quad 115.16119 \\ X_1 &= -6321.6176 (+) \\ X &= -6306.6517 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 7 \quad | \quad 117.4239 \\ Y_1 &= -3952.861 (+) \\ Y &= -3960.1300 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3821.11010 \\ Y_1 &= -3952.861 \\ \Delta Y &= 0 - 1131.751 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.1902927 \quad \textcircled{1} \\ \text{Sin} \alpha &= 7.4310013 \quad \textcircled{2} \\ \text{Cos} \beta &= 0.15230194 \quad \textcircled{3} \\ \text{sin} \beta &= 7.8522725 \quad \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.544525 \quad \textcircled{5} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= 7 \quad | \quad 118.92739 \\ \Delta X \times \textcircled{2} &= 7 \quad | \quad 120.62152 \\ F &= 188.193587 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 161.13276$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 \quad | \quad 185.436 \\ X_2 &= -6391.6193 (+) \\ X &= -6306.6517 \end{aligned}$$

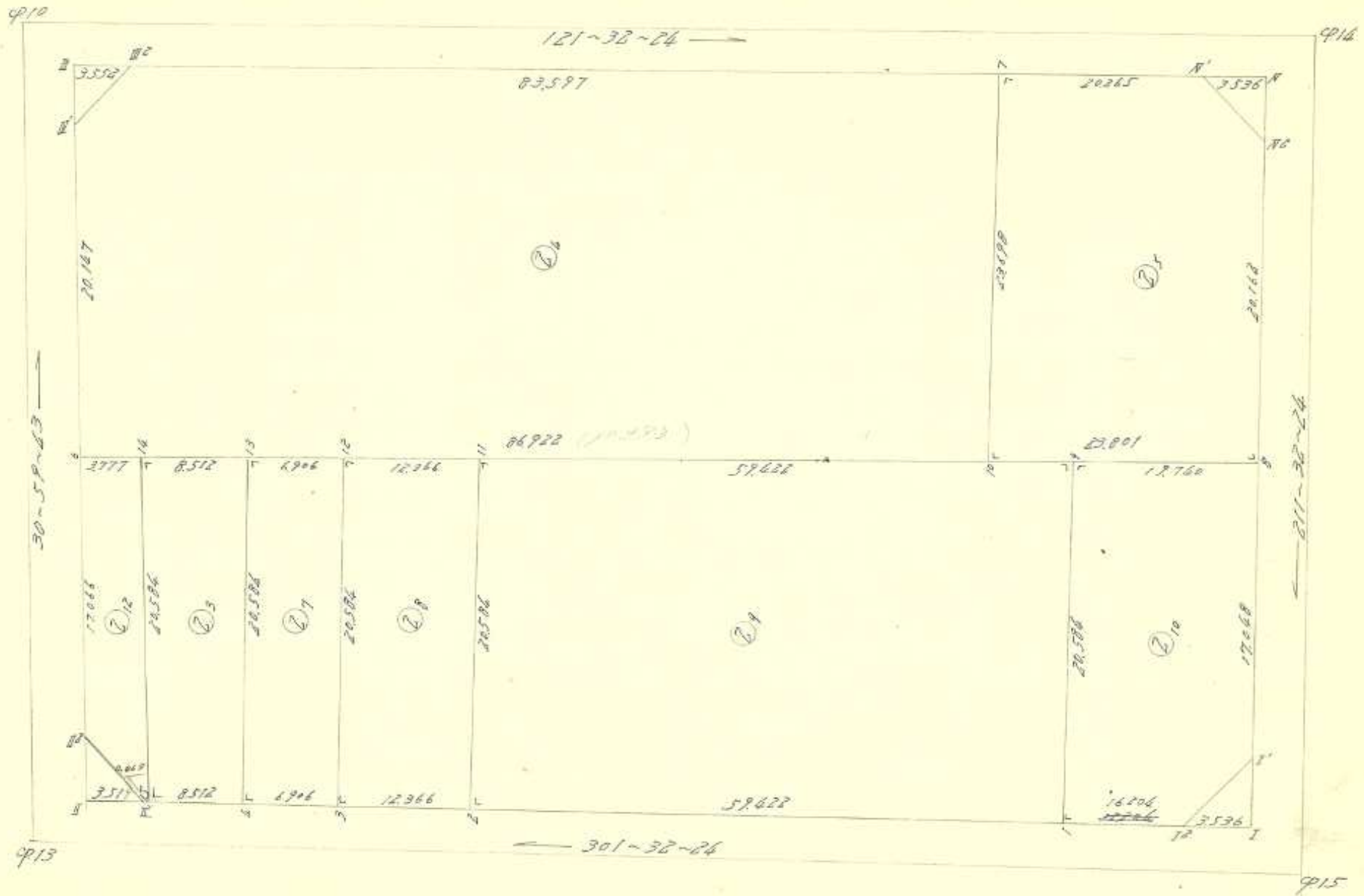
$$\begin{aligned} S_2 \times \textcircled{4} &= 7 \quad | \quad 139.200 \\ Y_2 &= -3821.11010 (+) \\ Y &= -3960.1300 \end{aligned}$$

隅切辺長及面積計算用紙

点名	3 I	3 II	3 III	3 III
α (X)	62 59 28	62 59 58		
α' (Y)	121 32 24	121 32 24		
Δ	121 27 04	58 32 56		
$\frac{A}{3}$	60 43 32	29 16 28		
$\frac{a}{3}$	1 500	1 500		
① $\sin \frac{A}{2}$	8722287	488993		
② $\frac{a}{2}$				
③ $\tan \frac{A}{2}$				
$b = (\text{②} + \text{①})$				
$c = (\text{③} + \text{①})$				
b	1 720	3 068		
c				
$\frac{a}{2} - c =$				

点名	3 I	3 II	3 III	3 III
α (X)				
α' (Y)				
A				
$\frac{A}{2}$				
$\frac{a}{3}$				
① $\sin \frac{A}{2}$				
② $\frac{a}{2}$				
③ $\tan \frac{A}{2}$				
$b = (\text{②} + \text{①})$				
$c = (\text{③} + \text{①})$				
b				
c				
$\frac{a}{2} - c =$				

8



多角点計算用紙

測量No. _____

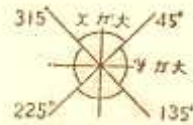


象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	φ15 ^I	" "		" "	.			.	.	.	.	6291.838	3887.362	φ15 ^I
φ15 ^I	φ15 ^{I'}			301 32 26	3.536			.	.	.	.	6293.688	3886.368	φ15 ^{I'}
φ15 ^{I'}	1				16.206			.	.	.	.	6302.166	3870.518	1
1	2				59.422			.	.	.	.	6333.267	3819.874	2
2	3	103 473			12.366			.	.	.	.	6339.716	3809.335	3
3	4				6.906			.	.	.	.	6343.368	3803.669	4
4	5				8.512			.	.	.	.	6347.780	3796.193	5
5	φ13 ^{I'}				.063			.	.	.	.	6347.813	3796.141	φ13 ^{I'}
φ13 ^{I'}	φ13 ^{II}				3.519			.	.	.	.	6349.656	3793.142	φ13 ^{II}
φ13 ^{II}	φ13 ^{II'}			30 59 63	3.519			.	.	.	.	6352.671	3796.956	φ13 ^{II'}
φ13 ^{II'}	6				17.066			.	.	.	.	6367.300	3803.763	6
6	φ10 ^{III'}	37 213			20.167			.	.	.	.	6386.571	3816.116	φ10 ^{III'}
φ10 ^{III'}	φ10 ^{III}				3.532			.	.	.	.	6387.616	3815.965	φ10 ^{III}
φ10 ^{III}	φ10 ^{III'}			121 32 26	3.532			.	.	.	.	6385.758	3818.972	φ10 ^{III'}
φ10 ^{III'}	7				83.597			.	.	.	.	6362.028	3890.220	7
7	φ14 ^{IV'}	103 862			20.265			.	.	.	.	6331.428	3907.693	φ14 ^{IV'}
φ14 ^{IV'}	φ14 ^{IV}				3.536			.	.	.	.	6329.578	3910.507	φ14 ^{IV}
φ14 ^{IV}	φ14 ^{IV'}			211 32 26	3.536			.	.	.	.	6326.566	3908.657	φ14 ^{IV'}
φ14 ^{IV'}	8				20.162			.	.	.	.	6309.381	3898.109	8
8	φ15 ^{I'}	37 210			17.068			.	.	.	.	6296.852	3889.192	φ15 ^{I'}
φ15 ^{I'}	φ15 ^I				3.536			.	.	.	.	6291.838	3887.362	φ15 ^I

多角点計算用紙

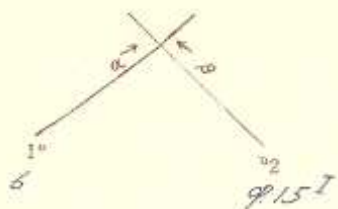
測量No.



象限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	-

測点	観点	内角	修正角	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	913 ^北											6369.656	3793.162	913 ^北
913 ^北	6			30 59 43	20.585	514967	857210	17.646		10.601		6367.300	3803.763	6
	8											6309.381	3898.109	8
8	9			301 32 24	19.760	523094	852275	10.326		16.826		6319.707	3881.285	9
9	1			211 32 24	20.584			17.563		10.767		6302.164	3870.518	1
1	2			301 32 24	59.422			31.083		50.644		6333.247	3819.876	2
2	11			31 32 24	20.584			17.563		10.767		6350.790	3830.641	11
11	12			301 32 24	12.366			6.469		10.539		6357.259	3820.102	12
12	3			211 32 24	20.584			17.563		10.767		6339.716	3809.335	3
3	4			301 32 24	6.906			3.612		5.886		6363.328	3803.649	4
4	13			31 32 24	20.584			17.563		10.767		6360.871	3816.216	13
13	14			301 32 24	8.512			4.455		7.255		6365.324	3806.961	14
14	5			211 32 24	20.585			17.563		10.767		6367.780	3796.193	5
	913 ^北			301 32 24	22.63			10.22		17.563		6367.813	3796.191	913 ^北
	8											6309.381	3898.109	8
8	10			301 32 24	23.801	523094	852275	12.650		20.285		6321.831	3877.824	10
10	7			31 32 24	23.698			20.197		12.396		6362.028	3890.220	7

算出点 8



$$9151 X_2 = - 62911.1838$$

$$6 X_1 = - 63167.1310$$

$$\Delta X = - 21751.662$$

$$\alpha = 121^\circ - 32' - 26''$$

$$\beta = 131^\circ - 32' - 26''$$

$$\beta - \alpha = 10^\circ - 00' - 00''$$

$$\Delta Y \times \textcircled{3} = + 1771.22936$$

$$\Delta X \times \textcircled{1} = 0.159.67376$$

$$E = 1110.17231$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 1110.17231$$

$$S_1 \times \textcircled{1} = \ominus \frac{1157.19119}{X_1 = - 63167.1310}$$

$$X = - 631019.1381$$

$$S_1 \times \textcircled{2} = + \frac{1196.13168}{Y_1 = - 318031.1763}$$

$$Y = - 318981.11019$$

$$Y_2 = - 318817.1362$$

$$Y_1 = - 318031.1763$$

$$\Delta Y = + 1891.599$$

$$\cos \alpha = 0.15231096 \textcircled{1}$$

$$\sin \alpha = 7.8522725 \textcircled{2}$$

$$\cos \beta = 7.8522725 \textcircled{3}$$

$$\sin \beta = + 15231096 \textcircled{4}$$

$$\sin(\beta - \alpha) = - 1.011111 \textcircled{5}$$

$$\Delta Y \times \textcircled{1} = 0.163.73016$$

$$\Delta X \times \textcircled{2} = 0.164.191438$$

$$F = 1201.5862$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 1201.5862$$

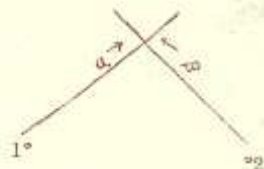
$$S_2 \times \textcircled{3} = 7 \frac{1117.1563}{X_2 = - 62911.1838}$$

$$X = - 631019.1381$$

$$S_2 \times \textcircled{4} = + \frac{11101.17167}{Y_2 = - 318817.1362}$$

$$Y = - 318981.11019$$

算出点



$$X_2 = -$$

$$X_1 = -$$

$$\Delta X = -$$

$$\alpha =$$

$$\beta =$$

$$\beta - \alpha =$$

$$\Delta Y \times \textcircled{3} = -$$

$$\Delta X \times \textcircled{4} = -$$

$$E =$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| =$$

$$S_1 \times \textcircled{1} = -$$

$$X_1 = -$$

$$X = -$$

$$S_1 \times \textcircled{2} = -$$

$$Y_1 = -$$

$$Y = -$$

$$Y_2 = -$$

$$Y_1 = -$$

$$\Delta Y = -$$

$$\cos \alpha = -$$

$$\sin \alpha = -$$

$$\cos \beta = -$$

$$\sin \beta = -$$

$$\sin(\beta - \alpha) = -$$

$$\Delta Y \times \textcircled{1} = -$$

$$\Delta X \times \textcircled{2} = -$$

$$F =$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| =$$

$$S_2 \times \textcircled{3} = -$$

$$X_2 = -$$

$$X = -$$

$$S_2 \times \textcircled{4} = -$$

$$Y_2 = -$$

$$Y = -$$

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	13	6360.871	-	+ 21.996	3814.216	-	+ 3.512	213.779	/	2512.295	/
	4	6363.328	-	+ 13.091	3803.448	-	+ 18.023	780.901	/	1354.251	/
	5	6367.780	-	⊖ 21.996	3796.193	-	⊖ 3.512	/	167.803	/	2115.861
	14	6365.324	-	⊖ 13.091	3806.961	-	⊖ 18.023	/	1177.334	/	1600.226
		-	-	-	-	-	-	-	-	-	-

控除シクル値

X = 於テ 6300

y = 於テ 3700

$$\Sigma = \underline{996.680} \quad \underline{1365.137} \quad \underline{3866.546} \quad \underline{3516.087}$$

$$2S = \underline{350.457}$$

$$\underline{350.459}$$

$$S = \underline{175.229}$$

53.01年 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₁₂	14	6365.324	-	+ 19.520	3806.961	-	+ 7.550	493.196	/	2087.879	/
	5	6367.780	-	+ 17.511	3796.193	-	+ 10.820	516.980	/	1684.436	/
	915 ^{11'}	6367.813	-	⊖ 6.891	3796.141	-	+ 1.239	59.240	/	/	470.226
	913 ¹²	6352.671	-	⊖ 19.687	3794.954	-	⊖ 7.602	/	400.405	/	1850.369
	6	6367.300	-	⊖ 12.653	3803.743	-	⊖ 12.007	/	808.071	/	1312.660
		-	-	-	-	-	-	-	-	-	-

控除シクル値

X = 於テ 6300

y = 於テ 3700

$$\Sigma = \underline{1069.416} \quad \underline{1208.476} \quad \underline{3772.315} \quad \underline{3633.255}$$

$$2S = \underline{139.060}$$

$$\underline{139.060}$$

$$S = \underline{69.530}$$

21.03年 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②4	7	6362.028	-	763.927	3890.220	-	058.852		2473.432	5.767	496
	10	6321.831	-	025.272	3877.824	-	786.477	1887.879			1966.768
	6	6367.300	-	062.760	3803.743	-	763.708	4287.548			234.836
	φ10 ^Ⅰ	6384.571	-	018.458	3814.116	-	015.229		1287.932		260.553
	φ10 ^Ⅱ	6385.758	-	742.543	3818.972	-	076.104		6526.527	807.126	

控除シクル値

X=於テ 6300
y=於テ 3800

$$\bar{x} = \frac{6175.427 + 10.287 + 891 + 6574.620 + 2.462}{157}$$

$$2S = \frac{4112.464}{2} = 2056.232$$

$$S = 2056.232$$

622.01⁶⁷ 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②5	φ16 ^Ⅰ	6326.564	-	722.047	3908.657	-	19.384	249.277		2395.561	
	8	6309.381	-	746.733	3898.109	-	730.833	289.244		466.350	
	10	6321.831	-	032.647	3877.824	-	77.889	172.225			2560.920
	7	6362.028	-	09.597	3890.220	-	029.669		1266.929		865.841
	φ16 ^Ⅱ	6331.428	-	715.664	3907.693	-	018.437		579.438	1662.272	

控除シクル値

X=於テ 6300
y=於テ 3800

$$\bar{x} = \frac{710.746 + 1826.367 + 4522.183 + 3406.561}{1115.621}$$

$$2S = \frac{1115.621}{2} = 557.811$$

$$S = 557.811$$

168.76⁶⁷ 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	11	6350.790	-	+ 26.012	3830.641	-	+ 228	11.580		735.752	
	8	6333.247	-	+ 11.076	3819.874	-	+ 21.306	708.361		220.085	
	3	6339.716	-	⊖ 26.012	3809.335	-	⊖ 228		9.055		226.152
	12	6357.259	-	⊖ 11.076	3820.102	-	⊖ 21.306		1219.960		222.610
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				

控除シクル値

X = 於テ 6.300

y = 於テ 3.800

$$\Sigma = \underline{719\ 941} \quad \underline{1229\ 015} \quad \underline{955\ 837} \quad \underline{446\ 762}$$

$$2S = \underline{509.074} \quad \underline{509.075}$$

$$S = \underline{254.537}$$

77.00[㊦]

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	12	6357.259	-	+ 21.155	3820.102	-	+ 4.881	279.481		425.258	
	3	6339.716	-	+ 13.931	3809.335	-	+ 16.653	661.391		130.066	
	4	6363.328	-	⊖ 21.155	3803.449	-	⊖ 4.881		211.486		72.966
	13	6360.871	-	⊖ 13.931	3814.216	-	⊖ 16.653		1013.685		198.063
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				
		-	-	-	-	-	-				

控除シクル値

X = 於テ 6.300

y = 於テ 3.800

$$\Sigma = \underline{940\ 872} \quad \underline{1225\ 169} \quad \underline{555\ 306} \quad \underline{271\ 007}$$

$$2S = \underline{284.297} \quad \underline{284.297}$$

$$S = \underline{142.148}$$

43.00[㊦]

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 ② ₁₀	8	6309.381	-	+ 24.855	3898.109	-	0	7.907				
	15 ^I	6294.852	-	+ 15.693	3889.192	-		113.781	1307.155	864.876	2438.499	
	15 ^{II}	6293.688	-	0	7.312	3884.328	-				1399.690	
	1	6302.164	-	0	26.019	3870.518	-					616.606
	9	6319.707	-	0	7.217	3881.285	-					1834.808
											3302.836	586.634

控除シタル値

X = 於テ 6200

y = 於テ 3800

$$\Sigma = \underline{3387.570} \quad \underline{4167.712} \quad \underline{3838.189} \quad \underline{3038.068}$$

$$2\Sigma = \underline{800.142}$$

$$\underline{800.141}$$

$$S = \underline{600.071}$$

1210209

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₉	9	6319.707	-	+ 48.626	3881.285	-	0	39.877			
	1	6302.164	-	+ 13.540	3870.518	-		+ 61.411	138.893	785.856	3952.564
	2	6333.267	-	0	48.626	3819.874	-				954.814
	11	6350.790	-	+ 13.540	3830.641	-		0	61.411	3119.065	414.879

控除シタル値

X = 於テ 6300

y = 於テ 3800

$$\Sigma = \underline{1458.686} \quad \underline{3904.921} \quad \underline{4387.443} \quad \underline{1921.207}$$

$$2\Sigma = \underline{2466.237}$$

$$\underline{2466.236}$$

$$S = \underline{1228.118}$$

3700069

年 月 日

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₁₀	8	6302.381	-	+24.855	3898.107	-	0 7.907				
	15 ¹	6294.852	-	+15.693	3889.192	-	713.781	1307.755	864.876	2438.499	
	15 ²	6293.688	-	0 7.312	3884.328	-	718.674	1749.530		1399.690	
	1	6302.164	-	0 26.019	3870.518	-	13.063	310.885			616.606
	9	6319.707	-	0 7.217	3881.285	-	0 27.591		3302.836		1834.808
											586.636

控除シタル値

X=於テ 6.200
Y=於テ 3.800

$\Sigma = 3387.570$ $\Sigma = 4167.712$ $\Sigma = 3838.189$ $\Sigma = 3038.068$
 $\Sigma S = 800.162$ $\Sigma S = 800.161$
 $S = 400.071$
 121.029

面積計算用紙

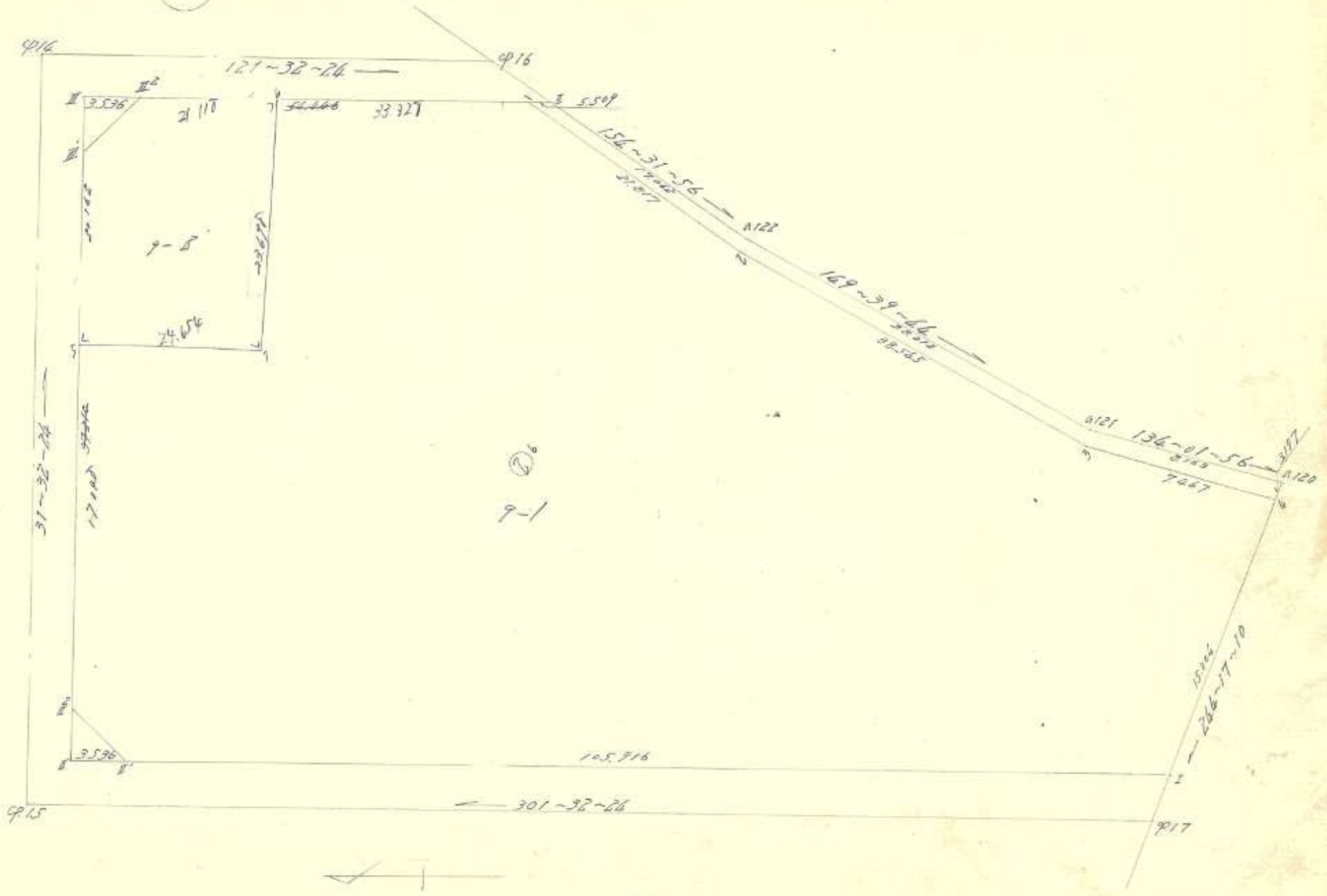
街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	$(1) \times (6)$		$(3) \times (4)$	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₄	9	6319.707	-	+48.626	3881.285	-	0 39.877				
	1	6302.164	-	+13.540	3870.518	-	+61.611	132.893	785.856	3952.564	
	2	6333.247	-	0 48.626	3819.874	-	+39.877	1325.791			954.814
	11	6350.790	-	+13.540	3830.641	-	0 61.611		3119.065	414.879	966.393

控除シタル値

X=於テ 6.300
Y=於テ 3.800

$\Sigma = 1458.684$ $\Sigma = 3904.921$ $\Sigma = 4367.643$ $\Sigma = 1921.807$
 $\Sigma S = 2466.237$ $\Sigma S = 2466.236$
 $S = 1233.118$
 370.009

9



面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
9 筆番号	414 ¹	6353.656	-	+18,348	3919.771	-	+15,410	1901,995			252,670	
	5	6316.566	-	+30,280	3903.585	-	10,466		1111,729		97,208	
	7	6279.546	-	17,301	3886.287	-	13,418			3118,503		176,954
	6	6242.543	-	37,284	3876.693	-	5,402	636,068				1194,501
	912 ²	6206.590	-	36,883	3918.625	-	22,812	2848,377				124,170

控除シタル値

X = 於テ 6500

y = 於テ 3900

$$\Sigma = 5386 \quad 890 \quad 4230 \quad 832 \quad 387 \quad 572 \quad 1545 \quad 625$$

$$2S = 1756,008 \quad 1156,007$$

$$S = 578,004$$

印
年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n -Δy _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
9 筆番号	5	6306.566	-	+1,132	3903.585	-	729,931	3179,729			108,413	
	415 ³	6271.576	-	+19,372	3886.286	-	7,755	711,242			1828,732	
	15 ⁴	6236.550	-	+10,263	3875.670	-	14,433		7940,956	5753,986		
	417 ⁵	6201.646	-	+48,899	3925.739	-	113,787			3263,686	7081,523	
	4	6167.256	-	11,700	3999.257	-	17,149			309,303		2331,307
	3	6133.246	-	33,857	3993.388	-	24,838	1071,660				7456,351
	2	6096.613	-	52,764	3976.619	-	28,800	2204,515				7237,728
	1	6056.510	-	37,130	3965.038	-	37,786	3631,612				6127,241
	6	6019.563	-	2,714	3926.623	-	40,201	4632,168			377,554	

控除シタル値 6500

X = 於テ 3300

y = 於テ

$$\Sigma = 507 \quad 5118 \quad 503 \quad 127 \quad 1513 \quad 905 \quad 1817 \quad 263 \quad 3153 \quad 647$$

$$2S = 7036,184 \quad 7036,185$$

$$S = 3518,092$$

印
年 月 日

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(8)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
9	4	6237.956	-	⊖ 3.803	3999.257	-	+ 8.250	313.137	,	,	187.324
筆番号	3	6243.166	-	⊖ 38.457	3993.888	-	+ 24.838	1071.660	,	,	1687.801
②	2	6276.413	-	⊖ 52.964	3974.419	-	+ 28.850	2204.515	,	,	1293.328
	1	6296.110	-	⊖ 16.815	3965.038	-	+ 4.687	450.468	,	,	252.864
916 ^号		6293.288	-	+ 18.286	3969.732	-	⊖ 12.031	,	1121.626	360.819	,
9122		6277.824	-	+ 48.211	3977.069	-	⊖ 26.537	,	2065.215	1305.024	,
9121		6245.017	-	+ 38.481	3996.269	-	⊖ 25.069	,	1128.531	1780.477	,
9180		6239.343	-	+ 7.061	4002.138	-	⊖ 2.988	,	117.557	368.146	,
				-			-				

控除シタル値

X=於テ 6200

y=於テ 3950

$$\bar{x} = \frac{4039.780}{28} = 144.278$$

$$2\bar{s} = \frac{393.149}{28} = 14.041$$

$$s = \frac{196.575}{28} = 7.020$$

594649 年 月 日

面積計算用紙

(令制)

街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(8)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
9	917 ^号	6231.446	-	⊖ 48.896	3985.739	-	+ 103.787	3263.686	,	,	4681.063
筆番号	915 ^号	6286.850	-	⊖ 60.268	3895.470	-	+ 91.433	2960.956	,	,	379.666
②	915 ^号	6291.714	-	⊖ 36.576	3894.306	-	⊖ 18.301	,	1678.458	,	157.496
	914 ^号	6323.426	-	⊖ 32.876	3912.771	-	⊖ 24.329	,	3002.831	,	781.495
	914 ^号	6324.590	-	+ 27.316	3918.635	-	⊖ 51.267	,	6387.356	782.194	,
	1	6296.110	-	+ 48.211	3977.069	-	⊖ 55.784	,	5561.400	3615.106	,
	2	6276.413	-	+ 52.964	3974.419	-	⊖ 28.850	,	2204.515	4471.168	,
	3	6243.166	-	+ 38.457	3993.888	-	⊖ 26.838	,	1071.660	3995.221	,
	4	6237.956	-	+ 11.700	3999.257	-	+ 8.149	309.303	,	1278.307	,

控除シタル値

X=於テ 6200

y=於テ 3890

$$\bar{x} = \frac{11513.965}{28} = 411.213$$

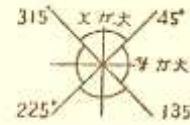
$$2\bar{s} = \frac{8192.275}{28} = 292.920$$

$$s = \frac{4096.138}{28} = 146.649$$

123908 年 月 日

多角点計算用紙

測量No. _____

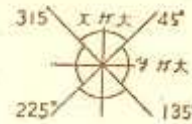


象 限	I	+	↗	+	↗
	II	+	↘	-	↘
	III	-	↙	-	↙
	IV	-	↖	+	↖

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N(+)	S(-)	E(+)	W(-)	X	Y	
	φ17 ^I	" "		" "	.			.	.	.	.	6231.446	3985.739	φ17 ^I
φ17 ^I	φ15 ^{II}			301 32 26	105.916	523077	852285	.	.	.	.	6286.850	3895.470	φ15 ^{II}
φ15 ^{II}	φ15 ^{II}			.	3.536	"	"	.	.	.	.	6288.700	3892.456	φ15 ^{II}
φ15 ^{II}	φ15 ^{II}			31 32 26	3.536	"	"	.	.	.	.	6291.714	3894.306	φ15 ^{II}
φ15 ^{II}	φ15 ^{II}				17.118	"	"	.	.	.	.	6306.865	3912.225	φ15 ^{II}
φ15 ^{II}	φ14 ^{III}				20.168	"	"	.	.	.	.	6323.426	3913.771	φ14 ^{III}
φ14 ^{III}	φ14 ^{III}				3.536	"	"	.	.	.	.	6326.440	3915.621	φ14 ^{III}
φ14 ^{III}	φ14 ^{III}			121 32 26	3.536	"	"	.	.	.	.	6326.590	3918.635	φ14 ^{III}
φ14 ^{III}	φ14 ^{III}				21.118	"	"	.	.	.	.	6313.543	3936.233	φ14 ^{III}
φ14 ^{III}	1	59.955			33.388	"	"	.	.	.	.	6296.110	3965.038	1
1	φ16 ^{IV}				5.509	"	"	.	.	.	.	6293.228	3969.732	φ16 ^{IV}
φ16 ^{IV}	φ122			154 31 56	17.062	429986	902836	.	.	.	.	6277.824	3977.069	φ122
φ122	φ121			149 39 46	38.012	505114	863053	.	.	.	.	6245.017	3996.269	φ121
φ121	φ120			134 01 56	8.163	695077	718936	.	.	.	.	6239.343	4002.138	φ120
φ120	4	18.201		244 17 10	3.197	433877	900972	.	.	.	.	6237.956	3999.257	4
4	φ17 ^I				15.004	"	"	.	.	.	.	6231.446	3985.739	φ17 ^I

多角点計算用紙

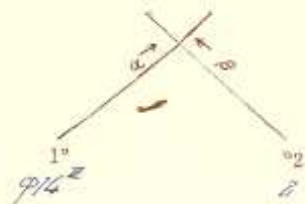
測量No.



象 限	I	+	/	+	/
	II	/	-	+	/
	III	/	-	/	-
	IV	+	/	/	-

測点	視点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
												4221.676	3952.261	a120 ²
	a121											4245.017	3996.269	a121
a121	a121'			329 39 44	20.000	505114	863053	17.261			10.102	4262.278	3986.167	a121'
a121	a121 ²			239 39 44	3.000	"	"		1.515		2.509	4260.763	3983.578	a121 ²
	a120											4239.343	4002.138	a120
a120	a120'			224 01 56	3.000	695077	718936		2.157		2.085	4237.186	4000.053	a120'
	a120 ²											4237.426	3912.771	a120 ²
a120 ²	5			511 38 24	20.768	523077	858285		17.184		10.546	4206.268	3902.225	5
5	7			121 +	24.654	"	"		12.896	21.016		4272.246	3924.227	7
7	6			21 +	22.698	"	"	20.177		18.376		4212.543	3996.533	6
6	a120 ²			201 "	21.118	"	"	17.066			17.999	4226.590	3912.625	a120 ²

算出點 1



$$\begin{aligned} X_2 &= -612761.1413 \\ X_1 &= -63261.440 \\ \Delta X &= -21510.1017 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3974.1419 \\ Y_1 &= -3975.1627 \\ \Delta Y &= +1.518 \end{aligned}$$

$$\alpha = 121^\circ - 59' - 12''$$

$$\text{Cos } \alpha = 0.191301916 \quad \textcircled{1}$$

$$\beta = 133^\circ - 31' - 58''$$

$$\text{Sin } \alpha = +0.181522275 \quad \textcircled{2}$$

$$\text{Cos } \beta = +0.19022827 \quad \textcircled{3}$$

$$\text{Sin } \beta = 0.14101013 \quad \textcircled{4}$$

$$\beta - \alpha = 12^\circ - 59' - 12''$$

$$\text{Sin}(\beta - \alpha) = -0.191615251 \quad \textcircled{5}$$

$$\Delta Y \times \textcircled{3} = +1579.68642$$

$$\Delta Y \times \textcircled{1} = 0.130175688$$

$$\Delta X \times \textcircled{4} = +1271.51176$$

$$\Delta X \times \textcircled{3} = 0.142663676$$

$$E = 1127.57266$$

$$F = 1171.87988$$

$$S_1 = \frac{E}{\textcircled{5}} = 1571.29820$$

$$S_2 = \frac{F}{\textcircled{5}} = 1271.81170$$

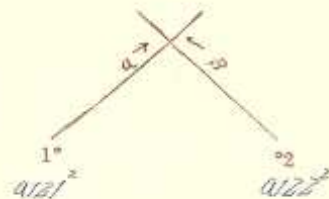
$$\begin{aligned} S_1 \times \textcircled{1} &= 9 \quad 11310.1310 \\ X_1 &= -63261.4410 \\ X &= -612761.1410 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \quad 1171.1697 \\ X_2 &= -612761.1413 \\ X &= -612761.1410 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \quad 11491.417 \\ Y_1 &= -3975.1627 \\ Y &= -3974.1419 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 9 \quad 1171.1387 \\ Y_2 &= -3974.1419 \\ Y &= -3974.1419 \end{aligned}$$

算出點 2



$$\begin{aligned} X_2 &= -612610.1763 \\ X_1 &= -62610.1763 \\ \Delta X &= -11610.1913 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3995.1861 \\ Y_1 &= -3993.1578 \\ \Delta Y &= -2.028 \end{aligned}$$

$$\alpha = 138^\circ - 59' - 14''$$

$$\text{Cos } \alpha = +0.186301631 \quad \textcircled{1}$$

$$\beta = 152^\circ - 31' - 58''$$

$$\text{Sin } \alpha = 0.19151097 \quad \textcircled{2}$$

$$\text{Cos } \beta = 0.19022827 \quad \textcircled{3}$$

$$\text{Sin } \beta = +0.14101013 \quad \textcircled{4}$$

$$\beta - \alpha = 14^\circ - 59' - 12''$$

$$\text{Sin}(\beta - \alpha) = -0.108618197 \quad \textcircled{5}$$

$$\Delta Y \times \textcircled{3} = +1271.51176$$

$$\Delta Y \times \textcircled{1} = 9.126131077$$

$$\Delta X \times \textcircled{4} = +1271.51176$$

$$\Delta X \times \textcircled{2} = 9.130175688$$

$$E = 1171.87988$$

$$F = 1141.215626$$

$$S_1 = \frac{E}{\textcircled{5}} = 118.11316$$

$$S_2 = \frac{F}{\textcircled{5}} = 1510.11316$$

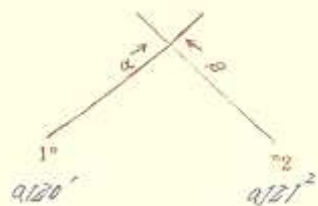
$$\begin{aligned} S_1 \times \textcircled{1} &= + \quad 1171.1697 \\ X_1 &= -612610.1763 \\ X &= -62610.1763 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 9 \quad 1141.1387 \\ X_2 &= -612610.1763 \\ X &= -612610.1763 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 9 \quad 1171.1387 \\ Y_1 &= -3993.1578 \\ Y &= -3995.1861 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \quad 1141.1387 \\ Y_2 &= -3995.1861 \\ Y &= -3995.1861 \end{aligned}$$

算出点 3



$$\begin{aligned} 0.121' X_2 &= -626161.17613 \\ 0.120' X_1 &= -6213171.1816 \end{aligned}$$

$$\Delta X = -112131.51717$$

$$\begin{aligned} \alpha &= 132^\circ - 61' - 15'' \\ \beta &= 149^\circ - 58' - 44'' \\ \beta - \alpha &= 17^\circ - 37' - 28'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +11161.211896 \\ \Delta X \times \text{④} &= -71171.190867 \end{aligned}$$

$$E = 11181.31029$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 1181.51749$$

$$\begin{aligned} S_1 \times \text{①} &= +11151.19810 \\ X_1 &= -6123171.1816 \end{aligned}$$

$$X = -6214431.1416$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -6101010.10513 \end{aligned}$$

$$Y = -629931.18188$$

$$\begin{aligned} Y_2 &= -629931.18178 \\ Y_1 &= -6101010.10513 \end{aligned}$$

$$\Delta Y = -211161.1475$$

$$\begin{aligned} \text{Cos} \alpha &= +0.1619916131 \text{ ①} \\ \text{Sin} \alpha &= 0.171819419 \text{ ②} \\ \text{Cos} \beta &= 0.18161310613 \text{ ③} \\ \text{Sin} \beta &= +0.15151519171 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -0.1216141214 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= 91111.129116 \\ \Delta X \times \text{②} &= 91161.191066 \end{aligned}$$

$$F = 11151.129930$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| = 1161.141121$$

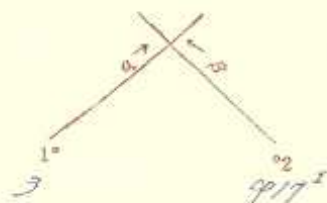
$$\begin{aligned} S_2 \times \text{③} &= 911171.16117 \\ X_2 &= -6161610.17163 \end{aligned}$$

$$X = -6214431.1416$$

$$\begin{aligned} S_2 \times \text{④} &= +111101.11110 \\ Y_2 &= -629931.18178 \end{aligned}$$

$$Y = -629931.18188$$

算出点 4



$$\begin{aligned} 0.117' X_2 &= -6213171.1416 \\ 0.117' X_1 &= -6214131.1416 \end{aligned}$$

$$\Delta X = -211171.1710$$

$$\begin{aligned} \alpha &= 132^\circ - 61' - 15'' \\ \beta &= 149^\circ - 17' - 10'' \\ \beta - \alpha &= 17^\circ - 15' - 55'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 91111.191151617 \\ \Delta X \times \text{④} &= 911101.111117 \end{aligned}$$

$$E = 11171.1615120$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 1171.141716$$

$$\begin{aligned} S_1 \times \text{①} &= 91111.111110 \\ X_1 &= -6123171.1416 \end{aligned}$$

$$X = -6214131.191516$$

$$\begin{aligned} S_1 \times \text{②} &= +11111.11111 \\ Y_1 &= -629931.18188 \end{aligned}$$

$$Y = -629931.181517$$

$$\begin{aligned} Y_2 &= -629931.18178 \\ Y_1 &= -629931.18188 \end{aligned}$$

$$\Delta Y = -211181.17149$$

$$\begin{aligned} \text{Cos} \alpha &= 0.1619916131 \text{ ①} \\ \text{Sin} \alpha &= +0.171819419 \text{ ②} \\ \text{Cos} \beta &= +0.14131317181 \text{ ③} \\ \text{Sin} \beta &= +0.19101017121 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -0.1216141214 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +11151.16166017 \\ \Delta X \times \text{②} &= 01119.1411170 \end{aligned}$$

$$F = 11161.1615172$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| = 1161.1015135$$

$$\begin{aligned} S_2 \times \text{③} &= +11161.15110 \\ X_2 &= -6161610.14163 \end{aligned}$$

$$X = -6214131.191516$$

$$\begin{aligned} S_2 \times \text{④} &= +11111.11111 \\ Y_2 &= -629931.18178 \end{aligned}$$

$$Y = -629931.181517$$

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
10	10	6686.657	-	+29.919	3523.016	-	+13.016	80.398		2194.566	
筆番号 ⑩	9	6663.855	-	+7.105	3469.412	-	+66.326	255.687			137.922
	919 ⁺	6693.762	-	+30.531	3456.690	-	+9.690	327.154			204.252
	aro	6694.386	-	+0.012	3459.722	-	915.738		541.167		117
	a9	6693.774	-	+7.729	3472.428	-	63.294		2137.692	173.346	

控除シクル値

X=於テ 6660

y=於テ 3450

$$\Sigma = \frac{663.239}{25} = 26528.859, \frac{2357.912}{25} = 342.291$$

$$\Sigma S = \frac{2015.620}{25} = 80.6248$$

$$S = 1007.810$$

306867 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
10	11	6680.759	-	+32.809	3541.250	-	+65.734	2021.912		2628.698	
筆番号 ⑪	8	6651.296	-	+16.904	3474.712	-	+72.538	101.263		248.492	
	7	6663.855	-	+35.261	3469.412	-	648.304		669.252		331.877
	10	6686.657	-	+20.350	3523.016	-	671.034		2603.893		1222.376
	12	6684.205	-	+5.898	3540.446	-	618.934		647.637	474.470	

控除シクル値

X=於テ 6650-

y=於テ 3460-

$$\Sigma = \frac{2123.175}{25} = 3920.782, \frac{3471.867}{25} = 1614.253$$

$$\Sigma S = \frac{6797.607}{25} = 898.806$$

$$S = 898.806$$

271897 年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 23	17	6656.439	-	+53.785	3552.571	-	+56.850	3208.557			
	7	6626.974	-	+5.043	3485.100	-	+77.859	2100.169			5516.781
	8	6651.396	-	0	3474.718	-	0		2921.863		177.989
	11	6680.759	-	0	3541.950	-	0		6387.815		1329.135
											463.704

控除シタル値

X = 於テ 6.600

y = 於テ 3.450

$\bar{x} = 5308.726$ $\bar{y} = 9809.678$ $\bar{x}^2 = 5673.790$ $\bar{y}^2 = 1782.839$

$\sum x = 3900.952$ $\sum y = 3900.951$

S = 1950.476

590.027 年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 24	5	6607.084	-	+21.878	3516.190	-	+9.590	75.608			575.525
	925 ¹	6600.847	-	+5.190	3500.076	-	+20.761	17.585			52.296
	425 ²	6602.694	-	0	3495.429	-	+9.638	25.965			73.715
	6	6616.425	-	0	3490.438	-	0		205.369		18.816
	20	6622.822	-	+6.561	3509.666	-	0		587.712		128.635

控除シタル値

X = 於テ 6.600 -

y = 於テ 3.490 -

$\bar{x} = 119.150$ $\bar{y} = 793.081$ $\bar{x}^2 = 756.256$ $\bar{y}^2 = 87.591$

$\sum x = 673.923$ $\sum y = 673.923$

S = 336.961

101.9307 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
10	筆番号	4	6614.287	-	33.840	3.530.855	-	+	2.687	38.332	4428.133	-
	9 ₂	5	6607.884	-	8.535	3.516.190	-	+	21.189	167.054	991.484	-
	20	6622.822	-	6.561	3.509.666	-	+	25.752	587.712	717.325	-	
	6	6614.425	-	4.558	3.490.438	-	+	24.566	354.365	375.499	-	
	7	6626.974	-	27.299	3.485.100	-	⊖	20.435	767.008	2,323,145	-	
	19	6641.724	-	12.687	3.518.873	-	⊖	45.755	1,909,082	1508.142	-	
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					

控除シタル値

X = 於テ 6.600

y = 於テ 3.600

$\Sigma = 11,147,463$ $\Sigma S = 2,676,088$ $\Sigma Y = 5,926,275$ $\Sigma X = 4,607,657$

$\Sigma S = 1,528,625$ $\Sigma X = 1,528,625$

S = 764.312
23/207 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
10	筆番号	3	6624.819	-	37.467	3.553.826	-	+	10.989	267.241	2,016,599	-
	21	4	6614.287	-	17.403	3.530.855	-	+	34.953	479.374	5,27,031	-
	19	6641.724	-	37.467	3.518.873	-	⊖	10.989	458,565	707,115	-	
	18	6651.754	-	17.465	3.561.844	-	⊖	34.953	1,808,958	728,295	-	
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					
			-			-	-					

控除シタル値

X = 於テ 6.600

y = 於テ 3.500

$\Sigma = 766,615$ $\Sigma S = 2,067,463$ $\Sigma Y = 2,706,974$ $\Sigma X = 1,204,744$

$\Sigma S = 1,300,842$ $\Sigma X = 1,500,842$

S = 750.424
227.007 年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	2	6629.204	-	+ 38.120	3564.853	-	0 11.255				
	3	6624.319	-	+ 22.750	3553.826	-	1 22.709	582.860		36.400	2073.448
	18	6651.754	-	+ 38.120	3541.844	-	+ 1.255	64.951			1824.542
	17	6656.439	-	+ 22.750	3552.571	-	0 22.709			1281.673	1195.790

控除シタル値

X = 於テ 6.600

y = 於テ 3.500

$$\Sigma = \frac{1.57211}{25} \sqrt{1318.072} \quad 2769.430 \quad 2.568.571$$

25 =

$$200.866$$

$$200.866$$

S =

$$350.421$$

$$106.00 \text{ ㊦}$$

年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 ②	13	6667.608	-	+ 27.775	3613.813	-	1 45.501	3078.232		3155.601		
	14	6647.033	-	+ 17.838	3566.500	-	+ 48.308	2272.070		1186.327		
	15	6649.770	-	+ 0.665	3565.305	-	+ 9.443	649.972		56.489		
	16	6646.168	-	+ 34.435	3559.057	-	1 26.859	1147.690			1964.758	
	18	6604.205	-	+ 37.158	3540.446	-	+ 10.363	872.616			1506.893	
	a8	6683.526	-	+ 8.345	3546.694	-	0 58.761		4479.689	389.661		
	a7	6675.860	-	+ 9.369	3594.207	-	0 60.176		6564.800	802.605		
	a6	6673.957	-	+ 1.052	3606.868	-	0 17.794		1315.991	112.625		
	918	6674.808	-	+ 6.549	3612.001	-	- 6.745		504.580	711.096		

控除シタル値

X = 於テ 6.600

y = 於テ 3.500

$$\Sigma = \frac{2.828.586}{25} \sqrt{10865.069} \quad 6696.122 \quad 3467.650$$

25 =

$$3026.476$$

$$3026.476$$

S =

$$1513.237$$

$$657.75 \text{ ㊦}$$

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
10	1	6632.606	-	+20.766	3572.801	-	+ .752	9.480		473.486	
筆番号	2	6629.004	-	+13.562	3564.553	-	+15.744	147.759			197.368
	16	6646.168	-	+20.766	3557.057	-	0 .752		19.678		146.546
②	15	6649.770	-	+13.562	3565.305	-	+15.744		468.699	207.566	

控除シタル値

X=於テ 6620

y=於テ 3550

$\Sigma = \frac{151.239}{28} = \frac{488.377}{337.138} = \frac{1681.052}{337.138} = \frac{343.914}{337.138}$

S = 768.569

50.99 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	926 ^A	6655.122	-	+18.946	3516.408	-	0 .533		13.390	955.890	
	926 ^B	6650.662	-	+22.516	3614.146	-	+43.807	901.008		1219.151	
②	1	6632.606	-	+3.629	3572.801	-	+47.646	124.165		46.455	
	14	6647.633	-	+35.002	3566.500	-	0 40.810		895.157		227.513
	13	6667.608	-	0 8.089	3617.613	-	0 49.908		1876.940		433.676

控除シタル値

X=於テ 6630

y=於テ 3560

$\Sigma = \frac{11025.173}{28} = \frac{2585.401}{1560.207} = \frac{2721.496}{1560.207} = \frac{167.199}{1560.207}$

S = 780.154

236.007 年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	△X+△X _{n+1}	Y _n	Y _n -Y _{n+1}	△y _n +△y _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
		筆番号 26	6637.803	-	+	18.253	3547.937	-	+	2.988	150.258	.	879.188	.
25	6633.401	-	+	17.886	3537.856	-	+	4.196	150.017	.	677.092	.
24	6619.917	-	+	19.114	3543.745	-	+	7.001	139.439	.	836.146	.
4	6614.287	-	0	21.807	3530.855	-	+	24.876	35.5.246	.	.	678.855
19	6641.766	-	0	37.067	3518.873	-	9	10.989	.	258.505	.	107.115
18	6651.754	-	+	3.921	3541.844	-	0	69.064	.	150.8.178	164.070	.
.	.	-	.	.	.	-
.	.	-	.	.	.	-
.	.	-	.	.	.	-
.	.	-	.	.	.	-

控除シタル値

X = 於テ 6600

y = 於テ 3500

$\Sigma = \frac{285.560}{1963.683} \quad \frac{6557.092}{1379.976}$

$2S = \frac{1177.120}{1177.120}$

S = 588561

178.4.29 年 月 日

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	△X+△X _{n+1}	Y _n	Y _n -Y _{n+1}	△y _n +△y _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
		筆番号 3	6624.312	-	+	17.886	3553.886	-	+	9.192	101.945	.	426.156	.
24	6619.917	-	0	9.002	3543.745	-	+	15.870	318.478	.	.	128.836
25	6633.401	-	+	17.886	3537.856	-	+	4.196	.	150.017	.	150.516
26	6637.803	-	+	9.082	3547.937	-	9	15.170	.	603.712	162.906	.
.	.	-	.	.	.	-
.	.	-	.	.	.	-
.	.	-	.	.	.	-
.	.	-	.	.	.	-

控除シタル値

X = 於テ 6600

y = 於テ 3500

$\Sigma = \frac{420.018}{202.721} \quad \frac{589.056}{260.344}$

$2S = \frac{323.712}{323.712}$

S = 161.856

1896.9 年 月 日

面積計算用紙

牌番号 0110	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 223	21	6677.361	-	+22.589	3584.654	-	⊖ 36.674			1370.028	1007.346	
	22	6660.767	-	+25.119	3583.364	-	+ 6.227	129.316			1089.260	
	23	6652.222	-	+13.734	3578.447	-	+ 16.864	206.449			527.956	
	14	6647.023	-	+ 2.972	3566.500	-	+ 12.122	92.287			65.508	
	15	6649.770	-	+ 2.765	3565.305	-	+ 2.443	92.258			21.889	
	16	6646.168	-	⊖ 34.435	3557.057	-	+ 24.857	153.330				387.358
	12	6684.265	-	⊖ 37.158	3560.486	-	+ 18.363	458.096				16.572
	28	6683.366	-	+ 6.896	3546.694	-	⊖ 44.208			1715.256	45.814	

控除シタル値

X = 於テ 6640

y = 於テ 3540

Σ = 1131.836 3285.884 2257.577 403.980

2S = 2153.548

2153.547

S = 1076.774

2057年 月 日

印

面積計算用紙

街廓番号 10	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号											

控除シタル値

X = 於テ

y = 於テ

Σ =

2S =

S =

年 月 日

印

面積計算用紙

街廓番号 10	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 22	14	6660.558		+ 12.001	2615.191		+ 18.637	15.979		290.117	
	25	6660.767		0 16.803	3583.360		+ 30.527	83.428			56.525
	21	6677.361		9 15.093	3586.654		0 10.843		188.605		70.243
	27	6675.860		+ 2.908	3590.007		9 12.214		150.310	48.361	
	26	6673.957		+ 1.052	3606.868		0 17.794		648.351	28.865	
	98 ^甲	6674.808		+ 12.999	2612.001		9 8.323		183.247	408.781	
				-			-				

控除シタル値

X = 於テ 660

y = 於テ 2500

$$\Sigma = \frac{37401}{912187} \quad \frac{227524}{106748}$$

$$2S = \frac{878756}{872756}$$

$$S = \frac{436378}{12809}$$

年 月 日

面積計算用紙

街廓番号 10	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 22	956 ^甲	6655.182		+ 9.896	3616.408		+ 1.025	57.602		1151.774	
	956 ^乙	6650.660		+ 22.516	3610.186		+ 23.607	2207.218		2570.111	
	1	6630.606		+ 5.689	3572.801		+ 27.626	1553.565		264.125	
	10	6607.033		0 19.636	3566.500		4 5.626		364.608		1205.774
	23	6658.882		9 12.734	3578.487		9 10.865		881.009		1077.116
	20	6660.767		9 8.316	3583.364		0 36.764		6034.238		693.255
	13	6660.558		+ 5.645	3615.191		9 12.044		2001.079	650.253	
				-			-				

控除シタル値

X = 於テ 660

y = 於テ 2500

$$\Sigma = \frac{3850363}{5380732} \quad \frac{4626}{5333076} \quad 115$$

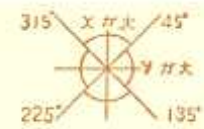
$$2S = \frac{1560367}{1560367}$$

$$S = \frac{780184}{23601}$$

年 月 日

角点計算用紙

測量 No.



象	+	+	+	+
限	+	-	-	-

観点	内 角	修正 角量	方位 角	辺 長	真 数		辺 の X		辺 の Y		点 の 座 標		点
					Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
15			336 24 32	.	.	.	.	.	.	.	6649.770	3565.305	15
15	A	259 35 30	156 00 00	61.900	559193	829038	12.246	.	18.156	.	6660.016	3582.461	A
			.	.	.	.	.	.	.	.	6675.860	3594.207	27
27	61		278 55 49	7.670	155237	987077	1.501	.	7.552	.	6677.361	3584.654	27
21	22		184 26 44	16.644	77518	996991	.	16.574	1.290	.	6660.767	3583.364	28
918 ^{II}			.	.	.	.	.	.	.	.	6674.808	3616.001	918 ^{II}
918 ^{III}	13		147 43 00	14.603	218427	975853	.	14.250	3.174	.	6669.558	3615.191	13
			.	.	.	.	.	.	.	.	6647.073	3566.500	12
12	23		66 24 38	19.018	100207	916425	5.209	.	11.987	.	6650.246	3578.227	12
			.	.	.	.	.	.	.	.	6684.319	3553.986	3
3	24		246 24 32	11.000	400207	916425	.	4.406	10.081	.	6619.917	3543.765	24
24	25		336 24 32	14.714	.	.	12.484	.	5.889	.	6633.401	3537.856	25
25	26		66 24 32	11.000	.	.	4.402	.	10.081	.	6677.803	3547.927	26
26	18		336 24 32	15.734	.	.	12.956	.	6.093	.	6651.754	3541.844	18

$$\begin{aligned} X_2 &= 6660 \cdot 787 \\ X_1 &= 6660 \cdot 558 \\ \Delta X &= -9 \end{aligned}$$

$$\begin{aligned} Y_2 &= 2583 \cdot 364 \\ Y_1 &= 13675 \cdot 181 \\ \Delta Y &= -9 \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots \\ \text{Log} \Delta X &= \dots \\ \text{Logtan} B &= 0.577745 \\ B &= 30^\circ - 24' - 22'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots & \text{Log} \Delta X &= \dots \\ \text{Logsin} B &= \dots & \text{Logcos} B &= \dots \\ \text{Log} D &= 0.996961 & \text{Log} D &= 0.996961 \\ \Delta x_2 &= \dots \\ \Delta y_2 &= \dots \\ D_2 &= \dots \\ D &= \dots \end{aligned}$$

距離 = $\sqrt{K^2 + L^2}$
方位角 $a = 284^\circ - 26' - 10.44''$

ΔX	ΔY	B, 在, a 象限	Xヲ出スニハ
+	+	I	B
-	+	II	$180^\circ - B$
-	-	III	$180^\circ + B$
+	-	IV	$360^\circ - B$

$$\begin{aligned} X_2 &= 6660 \cdot 787 \\ X_1 &= 6660 \cdot 558 \\ \Delta X &= -9 \end{aligned}$$

$$\begin{aligned} Y_2 &= 2583 \cdot 364 \\ Y_1 &= 13675 \cdot 181 \\ \Delta Y &= -9 \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots \\ \text{Log} \Delta X &= \dots \\ \text{Logtan} B &= 0.577745 \\ B &= 30^\circ - 24' - 22'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots & \text{Log} \Delta X &= \dots \\ \text{Logsin} B &= \dots & \text{Logcos} B &= \dots \\ \text{Log} D &= 0.996961 & \text{Log} D &= 0.996961 \\ \Delta x_2 &= \dots \\ \Delta y_2 &= \dots \\ D_2 &= \dots \\ D &= \dots \end{aligned}$$

距離 = $\sqrt{K^2 + L^2}$
方位角 $a = 210^\circ - 02' - 34''$

$$\begin{aligned} X_2 &= 6660 \cdot 787 \\ X_1 &= 6660 \cdot 558 \\ \Delta X &= -9 \end{aligned}$$

$$\begin{aligned} Y_2 &= 2583 \cdot 364 \\ Y_1 &= 13675 \cdot 181 \\ \Delta Y &= -9 \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots \\ \text{Log} \Delta X &= \dots \\ \text{Logtan} B &= 0.577745 \\ B &= 30^\circ - 24' - 22'' \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots & \text{Log} \Delta X &= \dots \\ \text{Logsin} B &= \dots & \text{Logcos} B &= \dots \\ \text{Log} D &= 0.996961 & \text{Log} D &= 0.996961 \\ \Delta x_2 &= \dots \\ \Delta y_2 &= \dots \\ D_2 &= \dots \\ D &= \dots \end{aligned}$$

距離 = $\sqrt{K^2 + L^2}$
方位角 $a = 270^\circ - 22' - 34''$

$$\begin{aligned} X_2 &= \dots \\ X_1 &= \dots \\ \Delta X &= \dots \end{aligned}$$

$$\begin{aligned} Y_2 &= \dots \\ Y_1 &= \dots \\ \Delta Y &= \dots \end{aligned}$$

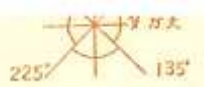
$$\begin{aligned} \text{Log} \Delta Y &= \dots \\ \text{Log} \Delta X &= \dots \\ \text{Logtan} B &= \dots \\ B &= \dots \end{aligned}$$

$$\begin{aligned} \text{Log} \Delta Y &= \dots & \text{Log} \Delta X &= \dots \\ \text{Logsin} B &= \dots & \text{Logcos} B &= \dots \\ \text{Log} D &= \dots & \text{Log} D &= \dots \\ \Delta x_2 &= \dots \\ \Delta y_2 &= \dots \\ D_2 &= \dots \\ D &= \dots \end{aligned}$$

距離 = $\sqrt{K^2 + L^2}$
方位角 $a = \dots$

多角点計算用紙

測量No. 1



限	III	IV	+	-
---	-----	----	---	---

測点	視点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
		"		"								6651.959	2617.116	926 ^{II}
	926 ^{II}											6650.662	2614.146	926 ^{II}
926 ^{II}	926 ^{II}			246.2438	3.261	400216	916421					6632.606	2572.801	1
926 ^{II}	1			"	45.116	"	"					6629.004	2564.253	2
1	2			"	9.000	"	"					6624.319	2553.826	3
2	3	126.472		"	11.705	"	"					6614.287	2530.855	4
3	4			"	25.066	"	"					6607.884	2516.190	5
4	5			"	16.002	"	"					6600.847	2500.076	925 ^I
5	925 ^I			"	17.584	"	"					6599.425	2496.870	925 ^I
925 ^I	925 ^I			"	3.553	"	"					6602.674	2485.429	925 ^I
925 ^I	925 ^I			336.5722	3.553	391445	920201					6614.425	2490.438	6
925 ^I	6			"	12.748	"	"					6626.974	2485.100	7
6	7			"	13.638	"	"					6651.396	2474.712	8
7	8	98.965		"	26.539	"	"					6643.855	2469.412	9
8	9			"	13.540	"	"					6692.762	2456.690	919 ^I
9	919 ^I			"	32.500	"	"					6694.386	2459.722	a10
919 ^I	a10			78.23.05	3.096	201315	979526					6693.774	2472.428	a9
a10	a9			92.45.29	12.721	648123	998841					6686.657	2523.016	10
a9	10			98.00.28	51.087	139317	990268					6684.205	2540.446	12
10	12	74.994		"	17.601	"	"					6683.326	2546.694	a8
12	a8			"	6.306	"	"					6675.860	2594.207	a7
a8	a7			98.55.49	48.096	155237	987877					6673.957	2606.868	a6
a7	a6			98.32.52	12.803	148624	988894					6674.808	2612.001	918 ^{II}
a6	918 ^{II}			80.34.52	5.203	163661	986517							

協和建設測量

量

多角点計算用紙

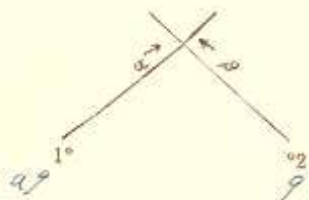
測量No. 138



象	+	+	+
限	N	+	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	926 ^W													
926 ^W	2			246 24 32	57.357	400216	916421		20.955		52.563	6629.004	3566.552	2
"	1			"	48.357	"	"		19.353		44.315	6632.606	3572.801	1
1	14	117.20		336 24 32	15.747	"	"	14.427			6.301	6647.033	3566.500	14
14	15			"	2.987	"	"	2.727			1.195	6649.770	3565.305	15
15	16			246 24 32	9.000	"	"		3.602		8.248	6646.168	3557.057	16
16	17			336 24 32	11.208	"	"	10.271			4.486	6656.439	3552.571	17
17	18	111		246 24 32	11.705	"	"		4.685		10.727	6651.754	3547.844	18
18	3			156 24 32	29.938	"	"		27.436	11.982		6626.319	3555.828	3
3	4			246 24 32	25.066	"	"		10.078		22.971	6614.287	3530.855	4
4	19			336 24 32	29.228	"	"	27.436			11.982	6641.724	3518.873	19
"	5			246 24 32	16.002	"	"		6.404		14.665	6607.984	3516.190	5
5	20			336 24 32	16.300	"	"	14.938			6.524	6622.822	3509.666	20
	17			336 24 32								6656.439	3552.571	17
17	11			"	26.538	400216	916421	24.320		10.621	6680.759	3561.950	11	
	919 ^E													
919 ^E	9			156 57 22	32.500	391445	920201		29.907	12.724		6692.762	3456.690	9
												6662.855	3449.412	

算出点 10



$$\begin{aligned} X_2 &= - 616191.1855 \\ X_1 &= - 616191.1776 \\ \Delta X &= 9 - 11291.999 \end{aligned}$$

$$\alpha = 128^\circ - 41' - 88''$$

$$\beta = 68^\circ - 57' - 22''$$

$$\beta - \alpha = 148^\circ - 54' - 54''$$

$$\begin{aligned} \Delta Y \times \text{③} &= 0111.18037 \\ \Delta X \times \text{③} &= 0127.53161 \\ E &= 126.35104 \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 151.101816$$

$$\begin{aligned} S_1 \times \text{①} &= 01117.114 \\ X_1 &= - 616191.1776 (+) \\ X &= - 616186.1657 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= + 11510.15188 \\ Y_1 &= - 314721.14218 (+) \\ Y &= - 315231.10718 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 314619.1412 \\ Y_1 &= - 314721.14218 \\ \Delta Y &= 9 - 11131.1018 \end{aligned}$$

$$\text{Cos} \alpha = 9 \cdot 113191310181 \text{ ①}$$

$$\text{Sin} \alpha = + \cdot 19191012419 \text{ ②}$$

$$\text{Cos} \beta = + \cdot 131911413161 \text{ ③}$$

$$\text{Sin} \beta = + \cdot 191210210151 \text{ ④}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 1511581151 \text{ ⑤}$$

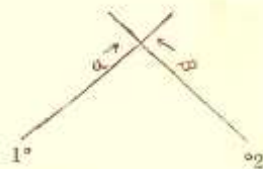
$$\begin{aligned} \Delta Y \times \text{①} &= + 1111.42175 \\ \Delta X \times \text{②} &= + 127.62726 \\ F &= 130.106747 \end{aligned}$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| = 150.82528$$

$$\begin{aligned} S_2 \times \text{③} &= + 11271.802 \\ X_2 &= - 616191.1855 (+) \\ X &= - 616186.1657 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= + 11521.6105 \\ Y_2 &= - 314619.1412 (+) \\ Y &= - 315231.10718 - 1 \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \dots \\ X_1 &= - \dots \\ \Delta X &= - \dots \end{aligned}$$

$$\alpha = \dots$$

$$\beta = \dots$$

$$\beta - \alpha = \dots$$

$$\begin{aligned} \Delta Y \times \text{③} &= - \dots \\ \Delta X \times \text{④} &= - \dots \\ E &= \dots \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = \dots$$

$$\begin{aligned} S_1 \times \text{①} &= - \dots \\ X_1 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - \dots \\ Y_1 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

$$\begin{aligned} Y_2 &= - \dots \\ Y_1 &= - \dots \\ \Delta Y &= - \dots \end{aligned}$$

$$\text{Cos} \alpha = - \dots \text{ ①}$$

$$\text{Sin} \alpha = - \dots \text{ ②}$$

$$\text{Cos} \beta = - \dots \text{ ③}$$

$$\text{Sin} \beta = - \dots \text{ ④}$$

$$\text{Sin}(\beta - \alpha) = - \dots \text{ ⑤}$$

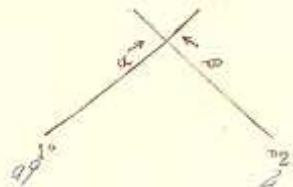
$$\begin{aligned} \Delta Y \times \text{①} &= - \dots \\ \Delta X \times \text{②} &= - \dots \\ F &= \dots \end{aligned}$$

$$S_2 = \left| \frac{F}{\text{⑤}} \right| = \dots$$

$$\begin{aligned} S_2 \times \text{③} &= - \dots \\ X_2 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - \dots \\ Y_2 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

算出点 12



$$\begin{aligned} 2 \quad X_2 &= -6161291 \cdot 10104 \\ 29 \quad X_1 &= -6161291 \cdot 12176 \\ \Delta X &= -1166 \cdot 1770 \end{aligned}$$

$$\alpha = 128^\circ - 0^\circ - 12^\circ$$

$$\beta = 123^\circ - 0^\circ - 13^\circ$$

$$\beta - \alpha = 123^\circ - 12^\circ - 10^\circ$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +186 \cdot 12565 \\ \Delta X \times \textcircled{4} &= +125 \cdot 12711 \\ E &= 1151 \cdot 10022 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 1691 \cdot 161018$$

$$\begin{aligned} S_1 \times \textcircled{1} &= -1119 \cdot 15119 \\ X_1 &= -6161291 \cdot 12176 \\ X &= -6161291 \cdot 2105 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1168 \cdot 10118 \\ Y_1 &= -3161261 \cdot 14128 \\ Y &= -311201 \cdot 16166 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3151641 \cdot 15153 \\ Y_1 &= -34721 \cdot 14128 \\ \Delta Y &= +1192 \cdot 1125 \end{aligned}$$

$$\text{Cos} \alpha = + \cdot 121319131018 \quad \textcircled{1}$$

$$\text{Sin} \alpha = + \cdot 19191012169 \quad \textcircled{2}$$

$$\text{Cos} \beta = + \cdot 19116142151 \quad \textcircled{3}$$

$$\text{Sin} \beta = + \cdot 141010121071 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 18171171317 \quad \textcircled{5}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= 01121 \cdot 83375 \\ \Delta X \times \textcircled{2} &= 9166 \cdot 19843 \\ F &= 1151 \cdot 130168 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 1601 \cdot 12354$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +11525 \cdot 12107 \\ X_2 &= -6161291 \cdot 10104 \\ X &= -6161291 \cdot 2105 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +11261 \cdot 1117 \\ Y_2 &= -3151641 \cdot 15153 \\ Y &= -3151641 \cdot 14128 \end{aligned}$$

算出点 13



$$\begin{aligned} 426^\circ \quad X_2 &= -616171 \cdot 19159 \\ 14 \quad X_1 &= -616171 \cdot 10133 \\ \Delta X &= -1114 \cdot 926 \end{aligned}$$

$$\alpha = 166^\circ - 22^\circ - 12^\circ$$

$$\beta = 124^\circ - 23^\circ - 0^\circ$$

$$\beta - \alpha = 128^\circ - 55^\circ - 12^\circ$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +149 \cdot 139378 \\ \Delta X \times \textcircled{4} &= 21171 \cdot 62597 \\ E &= 1150 \cdot 46975 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 181 \cdot 4989$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +11201 \cdot 15215 \\ X_1 &= -616171 \cdot 10133 \\ X &= -616171 \cdot 808 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1147 \cdot 11219 \\ Y_1 &= -316171 \cdot 14128 \\ Y &= -316171 \cdot 16113 \end{aligned}$$

$$\begin{aligned} Y_2 &= -316171 \cdot 11116 \\ Y_1 &= -316161 \cdot 15100 \\ \Delta Y &= +1150 \cdot 16116 \end{aligned}$$

$$\text{Cos} \alpha = + \cdot 191010121071 \quad \textcircled{1}$$

$$\text{Sin} \alpha = + \cdot 191161210151 \quad \textcircled{2}$$

$$\text{Cos} \beta = + \cdot 191751210131 \quad \textcircled{3}$$

$$\text{Sin} \beta = + \cdot 121191210171 \quad \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = - \cdot 1918117112 \quad \textcircled{5}$$

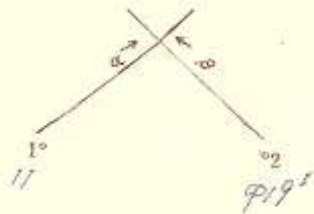
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +1120 \cdot 15688 \\ \Delta X \times \textcircled{2} &= +114 \cdot 15163 \\ F &= 1151 \cdot 74257 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 116 \cdot 101318$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +11159 \cdot 16198 \\ X_2 &= -616171 \cdot 19159 \\ X &= -616171 \cdot 16113 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +11191 \cdot 15163 \\ Y_2 &= -316171 \cdot 11116 \\ Y &= -316171 \cdot 16113 \end{aligned}$$

算出点 8



$$\begin{aligned} X_2 &= -661931.1762 \\ X_1 &= -661801.1759 \\ \Delta X &= -1129.0003 \end{aligned}$$

$$\alpha = 226^\circ - 34' - 38''$$

$$\beta = 256^\circ - 57' - 28''$$

$$\beta - \alpha = 30^\circ - 23' - 50''$$

$$\begin{aligned} Y_2 &= -314516.1690 \\ Y_1 &= -315617.1695 \\ \Delta Y &= 1101.0005 \end{aligned}$$

$$\cos \alpha = 0.4101021017 \text{ ①}$$

$$\sin \alpha = 0.91164215 \text{ ②}$$

$$\cos \beta = 0.1921021051 \text{ ③}$$

$$\sin \beta = 0.97143161 \text{ ④}$$

$$\sin(\beta - \alpha) = 0.5099191541 \text{ ⑤}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +178.45668 \\ \Delta X \times \text{④} &= +1125.08984 \\ E &= 170.36684 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1731.19708$$

$$\begin{aligned} \Delta Y \times \text{①} &= +136.12165 \\ \Delta X \times \text{②} &= 9111.91627 \\ F &= 146.02792 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} = 146.10600$$

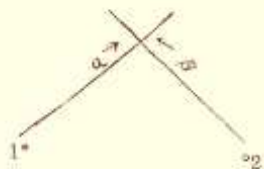
$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -661801.1759 \\ X &= -66151.396 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -315617.1695 \\ Y &= -31474.712 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 0 \\ X_2 &= -661931.1762 \\ X &= -66151.396 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= + \\ Y_2 &= -314516.1690 \\ Y &= -31474.712 \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \\ X_1 &= - \\ \Delta X &= - \end{aligned}$$

$$\alpha = \text{---}^\circ \text{---}' \text{---}''$$

$$\beta = \text{---}^\circ \text{---}' \text{---}''$$

$$\beta - \alpha = \text{---}^\circ \text{---}' \text{---}''$$

$$\begin{aligned} \Delta Y \times \text{③} &= - \\ \Delta X \times \text{④} &= - \\ E &= \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = \text{---}$$

$$\begin{aligned} S_1 \times \text{①} &= - \\ X_1 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - \\ Y_1 &= - \\ Y &= - \end{aligned}$$

$$\begin{aligned} Y_2 &= - \\ Y_1 &= - \\ \Delta Y &= - \end{aligned}$$

$$\cos \alpha = \text{---} \text{ ①}$$

$$\sin \alpha = \text{---} \text{ ②}$$

$$\cos \beta = \text{---} \text{ ③}$$

$$\sin \beta = \text{---} \text{ ④}$$

$$\sin(\beta - \alpha) = \text{---} \text{ ⑤}$$

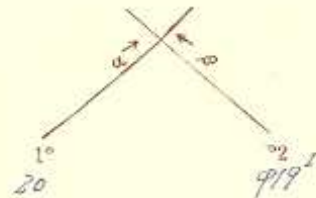
$$\begin{aligned} \Delta Y \times \text{①} &= \text{---} \\ \Delta X \times \text{②} &= - \\ F &= \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} = \text{---}$$

$$\begin{aligned} S_2 \times \text{③} &= - \\ X_2 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - \\ Y_2 &= - \\ Y &= - \end{aligned}$$

算出點 6



$$\begin{aligned} 919 \quad X_2 &= -6161931.17612 \\ 20 \quad X_1 &= -6161221.18222 \\ \Delta X &= -11710.19410 \end{aligned}$$

$$\begin{aligned} \alpha &= 128^\circ - 24' - 32'' \\ \beta &= 156^\circ - 57' - 22'' \\ \beta - \alpha &= 19^\circ - 32' - 15'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times ③ &= + 1418.174578 \\ \Delta X \times ④ &= + 1217.170847 \\ E &= 11201.198051 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 12101.191613$$

$$\begin{aligned} S_1 \times ① &= \ominus 1118.13197 \\ X_1 &= -6161221.18222 (+) \\ X &= -6161161.14225 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= \ominus 1119.12128 \\ Y_1 &= -3151019.18166 (+) \\ Y &= -3141910.14138 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3141561.16190 \\ Y_1 &= -3151019.18166 (-) \\ \Delta Y &= -91521.19778 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= \ominus .161010210171 \quad ① \\ \sin \alpha &= \ominus .1911644215 \quad ② \\ \cos \beta &= \ominus .191210210151 \quad ③ \\ \sin \beta &= + .13196141361 \quad ④ \\ \sin(\beta - \alpha) &= - .19191915161 \quad ⑤ \end{aligned}$$

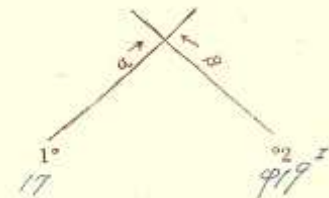
$$\begin{aligned} \Delta Y \times ① &= + 1121.120137 \\ \Delta X \times ② &= \ominus 1631.101119 (-) \\ F &= 11861.121256 \end{aligned}$$

$$S_2 = \frac{F}{⑥} = 18161.121615$$

$$\begin{aligned} S_2 \times ③ &= \ominus 11791.13197 \\ X_2 &= -6161931.17612 (+) \\ X &= -6161161.14225 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= + 11331.17418 \\ Y_2 &= -3141561.16190 (+) \\ Y &= -3141910.14138 \end{aligned}$$

算出點 7



$$\begin{aligned} 919 \quad X_2 &= -6161931.17612 \\ 17 \quad X_1 &= -6161561.14222 \\ \Delta X &= -1137.03223 \end{aligned}$$

$$\begin{aligned} \alpha &= 128^\circ - 24' - 13'' \\ \beta &= 156^\circ - 57' - 12'' \\ \beta - \alpha &= 19^\circ - 13' - 15'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times ③ &= + 188.122018 \\ \Delta X \times ④ &= + 176.160957 (-) \\ E &= 1172.157598 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 173.16140$$

$$\begin{aligned} S_1 \times ① &= \ominus 1129.14618 \\ X_1 &= -6161561.14222 (+) \\ X &= -616161.19776 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= \ominus 1167.14777 \\ Y_1 &= -315121.15177 (+) \\ Y &= -32815.11010 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3141561.16190 \\ Y_1 &= -315121.15177 (-) \\ \Delta Y &= -911915.18811 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= \ominus .161010210171 \quad ① \\ \sin \alpha &= \ominus .1911644215 \quad ② \\ \cos \beta &= \ominus .191210210151 \quad ③ \\ \sin \beta &= + .13196141361 \quad ④ \\ \sin(\beta - \alpha) &= + .19191915161 \quad ⑤ \end{aligned}$$

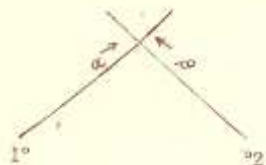
$$\begin{aligned} \Delta Y \times ① &= + 1198.172225 \\ \Delta X \times ② &= \ominus 134.120370 (-) \\ F &= 1172.157598 \end{aligned}$$

$$S_2 = \frac{F}{⑥} = 172.157793$$

$$\begin{aligned} S_2 \times ③ &= \ominus 1166.12228 \\ X_2 &= -6161931.17612 (+) \\ X &= -616161.19776 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= + 1128.14512 \\ Y_2 &= -3141561.16190 (+) \\ Y &= -32815.11010 \end{aligned}$$

算出点 5



$$\begin{aligned} X_2 &= -6610.61 \cdot 1333 \\ X_1 &= -6573.13 \cdot 1210 \\ \Delta X &= -1337.48 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3467.6 \cdot 1119 \\ Y_1 &= -3461.61 \cdot 1114 \\ \Delta Y &= -606.09 \end{aligned}$$

$$\alpha = 117^\circ - 121' - 15''$$

$$\cos \alpha = +.19271167 \text{ ①}$$

$$\beta = 126^\circ - 121' - 13''$$

$$\sin \alpha = 0.19891169 \text{ ②}$$

$$\cos \beta = 0.13971416 \text{ ③}$$

$$\sin \beta = 0.16101515 \text{ ④}$$

$$\beta - \alpha = 9^\circ - 15' - 18''$$

$$\sin(\beta - \alpha) = -.16101515 \text{ ⑤}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 0.1111 \cdot 1111 \\ \Delta X \times \text{④} &= 0.1111 \cdot 1111 \\ E &= 1111.1111 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +1111 \cdot 1111 \\ \Delta X \times \text{②} &= 0.1111 \cdot 1111 \\ F &= 1111.1111 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1111.1111$$

$$S_2 = \frac{F}{\text{⑤}} = 1111.1111$$

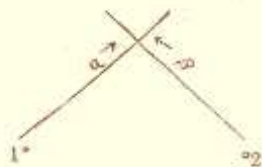
$$\begin{aligned} S_1 \times \text{①} &= +1111 \cdot 1111 \\ X_1 &= -1111 \cdot 1111 (+) \\ X &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 0.1111 \cdot 1111 \\ X_2 &= -1111 \cdot 1111 (+) \\ X &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0.1111 \cdot 1111 \\ Y_1 &= -1111 \cdot 1111 (+) \\ Y &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0.1111 \cdot 1111 \\ Y_2 &= -1111 \cdot 1111 (+) \\ Y &= -2222.2222 \end{aligned}$$

算出点 6



$$\begin{aligned} X_2 &= -6613.14 \cdot 1615 \\ X_1 &= -6573.13 \cdot 1210 \\ \Delta X &= -1440.01 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3461.61 \cdot 1114 \\ Y_1 &= -3461.61 \cdot 1114 \\ \Delta Y &= 0 \end{aligned}$$

$$\alpha = 117^\circ - 121' - 15''$$

$$\cos \alpha = -.19271167 \text{ ①}$$

$$\beta = 126^\circ - 121' - 13''$$

$$\sin \alpha = 0.19891169 \text{ ②}$$

$$\beta - \alpha = 9^\circ - 15' - 18''$$

$$\cos \beta = 0.13971416 \text{ ③}$$

$$\sin \beta = 0.16101515 \text{ ④}$$

$$\sin(\beta - \alpha) = -.16101515 \text{ ⑤}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 0.1111 \cdot 1111 \\ \Delta X \times \text{④} &= 0.1111 \cdot 1111 \\ E &= 1111.1111 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +1111 \cdot 1111 \\ \Delta X \times \text{②} &= 0.1111 \cdot 1111 \\ F &= 1111.1111 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1111.1111$$

$$S_2 = \frac{F}{\text{⑤}} = 1111.1111$$

$$\begin{aligned} S_1 \times \text{①} &= +1111 \cdot 1111 \\ X_1 &= -1111 \cdot 1111 (+) \\ X &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= 0.1111 \cdot 1111 \\ X_2 &= -1111 \cdot 1111 (+) \\ X &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0.1111 \cdot 1111 \\ Y_1 &= -1111 \cdot 1111 (+) \\ Y &= -2222.2222 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0.1111 \cdot 1111 \\ Y_2 &= -1111 \cdot 1111 (+) \\ Y &= -2222.2222 \end{aligned}$$

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 11-7	1 ¹²	6576.646	-	+15.116	3440.876	-	+23.501	205.019			155.279	
	2 ²	6576.497	-	0	3435.830	-	+9.078	58.942				66.990
	3	6586.991	-	0	3431.810	-	0	21.063				29.836
	4	6606.933	-	0	3476.493	-	0	29.779			1808.620	231.362
	4.25 ¹	6576.259	-	+14.720	3480.779	-	0	2.238			64.019	747.267
	5 ²	6591.613	-	+21.615	3478.931	-	+20.705	879.757			1057.692	

控除シタル値

X = 於テ 6570-
y = 於テ 3430.-

Σ = 1120 730 2569 989 1957 381 522.138
2S = 1029.200 1429.201
S = 714.600

216.1749 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 11-6	3	6634.685	-	+9.090	3464.221	-	0	57.275			2101.871	420.513
	4	6606.933	-	+27.682	3476.493	-	+33.221	880.602			3170.652	
	5	6586.991	-	0	3431.810	-	+57.275	201.233				189.210
	6	6615.342	-	0	3419.818	-	0	33.221			1181.705	230.014

控除シタル値

X = 於テ 6590-
y = 於テ 3410.-

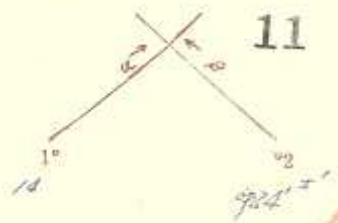
Σ = 1281 835 2363 776 2661 165 619.824
2S = 3041.941 3041.941
S = 1520.971

260.0747 年 月 日

变

11

算出点 13



$$\begin{aligned} X_2 &= - \dots \\ X_1 &= - \dots \\ \Delta X &= - \dots \end{aligned}$$

$$\begin{aligned} \alpha &= 156^\circ - 25' - 25'' \\ \beta &= 156^\circ - 25' - 25'' \\ \beta - \alpha &= 156^\circ - 25' - 10'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= \dots \\ \Delta X \times \textcircled{1} &= \dots \\ E &= \dots \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = \dots$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - \dots \\ X_1 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + \dots \\ Y_1 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

$$\begin{aligned} Y_2 &= - \dots \\ Y_1 &= - \dots \\ \Delta Y &= - \dots \end{aligned}$$

$$\begin{aligned} \cos \alpha &= 0 \dots \textcircled{1} \\ \sin \alpha &= - \dots \textcircled{2} \\ \cos \beta &= + \dots \textcircled{3} \\ \sin \beta &= + \dots \textcircled{4} \\ \sin(\beta - \alpha) &= - \dots \textcircled{5} \end{aligned}$$

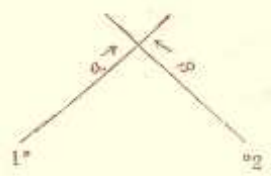
$$\begin{aligned} \Delta Y \times \textcircled{1} &= \dots \\ \Delta X \times \textcircled{2} &= \dots \\ F &= \dots \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = \dots$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + \dots \\ X_2 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + \dots \\ Y_2 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \dots \\ X_1 &= - \dots \\ \Delta X &= - \dots \end{aligned}$$

$$\begin{aligned} \alpha &= \dots \\ \beta &= \dots \\ \beta - \alpha &= \dots \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= - \dots \\ \Delta X \times \textcircled{4} &= - \dots \\ E &= \dots \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = \dots$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - \dots \\ X_1 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - \dots \\ Y_1 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

$$\begin{aligned} Y_2 &= - \dots \\ Y_1 &= - \dots \\ \Delta Y &= - \dots \end{aligned}$$

$$\begin{aligned} \cos \alpha &= - \dots \textcircled{1} \\ \sin \alpha &= - \dots \textcircled{2} \\ \cos \beta &= - \dots \textcircled{3} \\ \sin \beta &= - \dots \textcircled{4} \\ \sin(\beta - \alpha) &= - \dots \textcircled{5} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= - \dots \\ \Delta X \times \textcircled{2} &= - \dots \\ F &= \dots \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = \dots$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - \dots \\ X_2 &= - \dots (+) \\ X &= - \dots \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - \dots \\ Y_2 &= - \dots (+) \\ Y &= - \dots \end{aligned}$$

面積計算用紙

街廓番号 11	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②	4	6604.676	-	+ 32.431	2477.199	-	+ 39.513	974.344		6580.668	
	5	6585.320	-	+ 5.276	2431.702	-	+ 51.448	273.693		167.133	
	6	6599.402	-	⊖ 33.431	2425.752	-	⊖ 39.513		746.631		860.691
	3	6618.761	-	⊖ 5.276	2471.215	-	⊖ 51.448		1993.069		375.425

控除シタル値

X = 於テ 6580

y = 於テ 2400

$\Sigma =$ 1248.637 2759.700 2747.001 1236.124

2S = 1511.063

S = 755.531

28.559 年 月 日

面積計算用紙

街廓番号 11	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号											

控除シタル値

X = 於テ

y = 於テ

$\Sigma =$

2S =

S =

年 月 日

面積計算用紙

11
11
11-7

NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
	(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
1	6574.644	-	+ 6.529	2450.070	-	+ 23.960	118.306	.	262.044	.
2	6576.497	-	⊖ 10.676	2435.430	-	+ 8.372	52.293	.	.	279.251
3	6585.220	-	⊖ 19.411	2431.700	-	⊖ 19.810	.	228.169	.	489.654
4	6594.907	-	+ 2.284	2454.560	-	⊖ 27.588	.	687.134	129.88%	.
5	6599.036	-	+ 20.263	2459.190	-	+ 19.166	124.659	.	1201.293	.

控除シタル値 $\bar{X} = 7.086$ $\bar{Y} = 9.278$ $\Sigma = 329.817$ 775.205 1537.221 961.885
 $X = \text{於テ } 6570$ $\bar{X} = 7.086$ $2S = 625.406$ 625.436
 $Y = \text{於テ } 2400$ $S = 312.703$
 1960年 年 月 日

面積計算用紙

11
11
11-6

NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1) × (6)		(3) × (4)	
	(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
1	6596.259	-	+ 13.081	2480.779	-	⊖ 1.202	.	29.161	402.204	.
2	6591.613	-	+ 13.223	2478.931	-	+ 21.489	249.452	.	882.455	.
3	6589.036	-	⊖ 3.234	2459.890	-	+ 24.691	74.962	.	.	20.601
4	6594.907	-	⊖ 21.403	2450.240	-	⊖ 17.909	.	266.270	.	91.745
5	6604.674	-	⊖ 1.252	2477.199	-	⊖ 26.539	.	654.023	.	26.273

控除シタル値 $\bar{X} = 25.234$ $\bar{Y} = 26.234$ $\Sigma = 224.514$ 949.954 294.560 159.119
 $X = \text{於テ } 6580$ $\bar{X} = 25.234$ $2S = 625.440$ 625.421
 $Y = \text{於テ } 2450$ $S = 312.720$
 1960年 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
11	1	6665.276	-	+34.188	3451.428	-	+13.793	210.718		1754.553	
筆番号	10	6655.079	-	⊖19.530	2627.449	-	+34.064	173.011			371.305
②	9	6678.806	-	⊖25.376	3417.356	-	+8.300	181.535			440.406
	112	6680.455	-	⊖10.395	3421.147	-	⊖13.896		707.448		219.873
	919	6689.201	+	+15.179	3447.242	-	⊖30.873		1126.730	676.010	
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				

控除シタル値

X = 於テ 6.650

y = 於テ 3.400

$\Sigma = 565.2481914$ 1808.390 565.031 834

$\Sigma S = 1348.932$ 1348.931

S = 874.416

204.01 ±

印
年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
11	18	6687.640	-	⊖23.396	3409.599	-	+37.541	256.253		1557.915	458.538
筆番号	9157	6669.566	-	⊖41.166	3376.717	-	⊖7.757		306.913		231.563
②	9	6678.806	-	+14.487	3417.356	-	⊖31.338		1529.482	396.206	
	10	6655.079	-	+24.899	3427.449	-	⊖8.750		1219.441	909.778	
	11	6654.507	-	+8.909	3426.106	-	⊖2.203		53.789	321.668	
	12	6646.170	-	+16.867	3429.652	-	+16.507	266.918		668.810	
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				
			-	-		-	-				

控除シタル値

X = 於テ 6.630

y = 於テ 3.390

$\Sigma = 523$ 171 2109 825 2296 257 710 103

$\Sigma S = 1586.654$ 1586.654

S = 793.327

239.98 ±

印
年 月 日

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	$\Delta X + \Delta X_{n+1}$	Yn	Yn-Yn+1	$\Delta y_n + \Delta y_{n+1}$	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	4	6607.095	-	+30.997	3476.169	-	+40.537	4341.210	,	2361.010	,
⑧	5	6587.744	-	+7.693	3430.678	-	+50.416	4423.702	,	236.066	,
	6	6599.402	-	+30.997	3425.753	-	+40.537	4329.459	,	798.266	,
	3	6618.741	-	+7.693	3471.215	-	+50.416	5988.446	,	547.857	,

控除シタル値
 X = 於テ 6500
 y = 於テ 3400

$\Sigma = 8765.012$ $\Sigma 10015.905$ $\Sigma 2597.016$ $\Sigma 1346.123$
 $\Sigma S = 1250.892$ 1250.892
 $S = 825.446$
 189.50^坪

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	$\Delta X + \Delta X_{n+1}$	Yn	Yn-Yn+1	$\Delta y_n + \Delta y_{n+1}$	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号	925 ^{II'}	6596.259	-	+15.482	3480.779	-	+27.702	3702	,	265.867	1250.620
⑨	925 ^{II''}	6591.613	-	+21.615	3478.931	-	+40.715	3729.107	,	1706.094	,
	926 ^{II'}	6576.644	-	+15.116	3440.074	-	+43.511	3727.089	,	605.759	,
	926 ^{II''}	6576.497	-	+13.700	3435.430	-	+9.396	718.766	,	,	464.173
	5	6587.744	-	+30.598	3430.678	-	+40.739	3574.603	,	338.685	,
	4	6607.095	-	+8.915	3476.169	-	+50.701	5365.547	,	648.574	,

控除シタル値
 X = 於テ 6500
 y = 於テ 3400

$\Sigma = 7694.960$ $\Sigma 2206.037$ $\Sigma 2562.473$ $\Sigma 2051.397$
 $\Sigma S = 1511.675$ 1511.676
 $S = 755.538$
 228.55^坪

多角点計算用紙

測量No. _____



象	I	+	+	+
眼	II	-	-	-
	III	+	+	+
	IV	-	-	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	926 ¹	"	"	"	.			.	.	.	.	6573.220	3436.814	926 ¹
926 ²	926 ²			337 05 50	3.557	389169	921167	.	.	.	.	6576.497	3435.430	926 ²
926 ¹	5			"	12.210	.	.	.	.	.	.	6586.981	3431.420	5
5	6			"	12.656	.	.	.	.	.	.	6587.746	3420.678	6
6	7		101.034	"	30.810	.	.	.	.	.	.	6615.343	3419.018	7
7	8			"	10.700	.	.	.	.	.	.	6579.402	3425.753	8
8	0157			"	34.658	.	.	.	.	.	.	6627.784	3413.763	0157
0157	9			66 29 37	23.168	398938	917021	.	.	.	.	6637.840	3409.599	9
9	012		27.302	"	4.134	.	.	.	.	.	.	6669.566	3396.111	012
012	019			66 28 53	21.916	399060	916925	.	.	.	.	6678.806	3417.356	019
019	1			115 65 22	26.000	391445	920201	.	.	.	.	6680.455	3421.147	1
1	2			"	19.760	.	.	.	.	.	.	6689.201	3441.242	2
2	3		101.002	"	13.505	.	.	.	.	.	.	6665.276	3451.420	3
3	4			"	30.844	.	.	.	.	.	.	6647.093	3459.155	4
4	925 ¹			"	30.789	.	.	.	.	.	.	6634.665	3466.421	925 ¹
925 ¹	925 ²			"	12.656	.	.	.	.	.	.	6616.333	3476.493	925 ²
925 ²	925 ³			"	12.148	.	.	.	.	.	.	6609.493	3476.169	925 ³
925 ³	925 ⁴			"	11.798	.	.	.	.	.	.	6596.259	3480.779	925 ⁴
925 ⁴	925 ⁵			"	3.519	.	.	.	.	.	.	6593.021	3482.156	925 ⁵
925 ⁵	926 ¹			246 26 32	3.519	400216	916421	.	.	.	.	6591.613	3478.931	926 ¹
926 ¹	926 ²			"	42.401	.	.	.	.	.	.	6596.259	3480.779	926 ²
926 ²	926 ¹			"	3.557	.	.	.	.	.	.	6573.220	3436.814	926 ¹

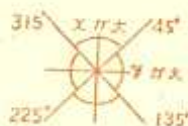
変更

変更

協和建設測量

多角点計算用紙

測量No.

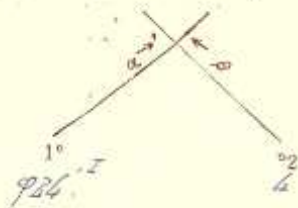


象限	I	+	+	+
	II	-	+	-
限	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正角最	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	419 ^W	"	"	"	"									
419 ^W	2			156 57 22	45.760	391445	920201	42.108	17.913			6689.201	3441.262	419 ^W
	1				26.000	"	"	23.925	10.178			6647.093	3459.155	2
1	10			246 57 22	26.050	"	"	10.597		23.971		6665.276	3451.420	1
10	11			156 57 22	7.460	"	"	572		1.343		6684.507	3436.106	10
11	12			156 57 22	9.060	"	"	8.327	3.546			6666.170	3429.658	11
	925 ^W													
925 ^W	4			336 57 22	18.563	391445	920201	11.402				6593.021	3482.156	925 ^W
	3				27.950	"	"	25.720				6618.791	3471.315	4
4	14			246 57 22	24.950			9.747		22.909		6696.907	3454.240	14
				246 57 22	24.674			9.659		22.705		6634.665	3462.641	3
				336 57 22	13.505			12.427		5.286		6625.006	3441.736	13
												6637.433	3436.450	14

協和建設測量

算出点 5



$$\begin{aligned} X_2 &= -661041.674 \\ X_1 &= -657731.620 \\ \Delta X &= -1130.554 \end{aligned}$$

$$\alpha = 337^\circ - 51' - 54''$$

$$\beta = 346^\circ - 57' - 32''$$

$$\beta - \alpha = 89^\circ - 51' - 37''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 0.155.88818 \\ \Delta X \times \textcircled{4} &= 0.155.88818 \\ E &= 155.88818 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 155.88818$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 1130.554 \\ X_1 &= -657731.620 \\ X &= -658862.174 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 1130.554 \\ Y_1 &= -342361.814 \\ Y &= -343502.368 \end{aligned}$$

$$\begin{aligned} Y_2 &= -342361.814 \\ Y_1 &= -343502.368 \\ \Delta Y &= +1140.554 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= + 0.192111617 \textcircled{1} \\ \text{Sin} \alpha &= 0.181911619 \textcircled{2} \\ \text{Cos} \beta &= 0.1391743161 \textcircled{3} \\ \text{Sin} \beta &= 0.1921021051 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - 0.199999917 \textcircled{5} \end{aligned}$$

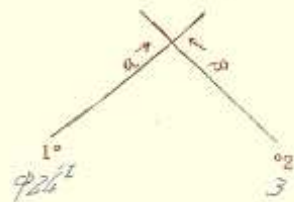
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 137.20133 \\ \Delta X \times \textcircled{2} &= 0.155.88818 \\ F &= 155.88818 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 155.88818$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0.155.88818 \\ X_2 &= -661041.674 \\ X &= -658862.174 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0.155.88818 \\ Y_2 &= -342361.814 \\ Y &= -343502.368 \end{aligned}$$

算出点 6



$$\begin{aligned} X_2 &= -661181.1761 \\ X_1 &= -657731.620 \\ \Delta X &= -1145.5561 \end{aligned}$$

$$\alpha = 111^\circ - 11' - 11''$$

$$\beta = 111^\circ - 11' - 11''$$

$$\beta - \alpha = 111^\circ - 11' - 11''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= - 1145.5561 \\ \Delta X \times \textcircled{4} &= 0.155.88818 \\ E &= 1145.5561 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 1145.5561$$

$$\begin{aligned} S_1 \times \textcircled{1} &= 7.1261.1182 \\ X_1 &= -657731.620 \\ X &= -658876.738 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0.155.88818 \\ Y_1 &= -342361.814 \\ Y &= -342361.814 \end{aligned}$$

$$\begin{aligned} Y_2 &= -342361.814 \\ Y_1 &= -343502.368 \\ \Delta Y &= +1140.554 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= - 0.111111111 \textcircled{1} \\ \text{Sin} \alpha &= - 0.111111111 \textcircled{2} \\ \text{Cos} \beta &= - 0.111111111 \textcircled{3} \\ \text{Sin} \beta &= - 0.111111111 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - 0.111111111 \textcircled{5} \end{aligned}$$

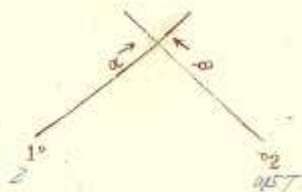
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 126.1182 \\ \Delta X \times \textcircled{2} &= 0.155.88818 \\ F &= 126.1182 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 126.1182$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0.155.88818 \\ X_2 &= -661181.1761 \\ X &= -658876.738 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0.155.88818 \\ Y_2 &= -342361.814 \\ Y &= -342361.814 \end{aligned}$$

算出點 7



$$\begin{aligned} 8757 X_2 &= -616191.1586 \\ 2 X_1 &= -616171.1093 \\ \Delta X &= -112121.0493 \end{aligned}$$

$$\alpha = 846^\circ - 57' - 22''$$

$$\beta = 857^\circ - 45' - 15''$$

$$\beta - \alpha = 19^\circ - 48' - 28''$$

$$\begin{aligned} \Delta Y \times ③ &= +159.07405 \\ \Delta X \times ④ &= +118.74579 \\ E &= 169.32986 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 119.3209$$

$$\begin{aligned} S_1 \times ① &= 9 \quad 119.3209 \\ X_1 &= -6647.093 \\ X &= -6627.784 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= 9 \quad 118.5192 \\ Y_1 &= -3459.155 \\ Y &= -3413.763 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3396.1111 \\ Y_1 &= -3459.1555 \\ \Delta Y &= -21163.044 \end{aligned}$$

$$\cos \alpha = 0.139116361 \quad ①$$

$$\sin \alpha = 9.192101815 \quad ②$$

$$\cos \beta = 9.192211617 \quad ③$$

$$\sin \beta = +.13189116191 \quad ④$$

$$\sin(\beta - \alpha) = -.191999171 \quad ⑤$$

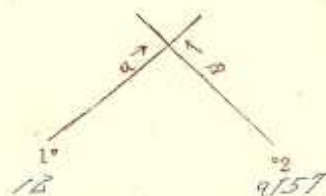
$$\begin{aligned} \Delta Y \times ① &= +124.67769 \\ \Delta X \times ② &= 9.120.67977 \\ F &= 145.135746 \end{aligned}$$

$$S_2 = \frac{F}{⑤} = 115.13576$$

$$\begin{aligned} S_2 \times ③ &= 9 \quad 1141.782 \\ X_2 &= -6669.566 \\ X &= -6627.784 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= + \quad 1177.652 \\ Y_2 &= -3398.1111 \\ Y &= -3413.763 \end{aligned}$$

算出點 8



$$\begin{aligned} 9157 X_2 &= -616191.1586 \\ 18 X_1 &= -616461.1170 \\ \Delta X &= -11831.996 \end{aligned}$$

$$\alpha = 846^\circ - 57' - 22''$$

$$\beta = 857^\circ - 45' - 15''$$

$$\beta - \alpha = 19^\circ - 48' - 28''$$

$$\begin{aligned} \Delta Y \times ③ &= +130.89686 \\ \Delta X \times ④ &= +119.10500 \\ E &= 181.79186 \end{aligned}$$

$$S_1 = \frac{E}{⑤} = 181.7918$$

$$\begin{aligned} S_1 \times ① &= 9 \quad 1581.590 \\ X_1 &= -6646.1170 \\ X &= -6627.640 \end{aligned}$$

$$\begin{aligned} S_1 \times ② &= 9 \quad 120.059 \\ Y_1 &= -3429.652 \\ Y &= -3409.599 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3396.1111 \\ Y_1 &= -3429.652 \\ \Delta Y &= -2133.541 \end{aligned}$$

$$\cos \alpha = 0.01914361 \quad ①$$

$$\sin \alpha = 9.1922015 \quad ②$$

$$\cos \beta = 9.192211617 \quad ③$$

$$\sin \beta = +.13189116191 \quad ④$$

$$\sin(\beta - \alpha) = -.191999171 \quad ⑤$$

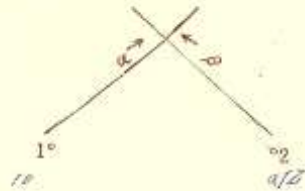
$$\begin{aligned} \Delta Y \times ① &= +113.18915 \\ \Delta X \times ② &= 9.21.52915 \\ F &= 34.65827 \end{aligned}$$

$$S_2 = \frac{F}{⑤} = 34.6584$$

$$\begin{aligned} S_2 \times ③ &= 9 \quad 1131.926 \\ X_2 &= -6619.006 \\ X &= -6627.640 \end{aligned}$$

$$\begin{aligned} S_2 \times ④ &= + \quad 117.488 \\ Y_2 &= -3396.1111 \\ Y &= -3409.599 \end{aligned}$$

算出点 9



$$\begin{aligned} \frac{4}{12} X_2 &= - 66810.1455 \\ 11 X_1 &= - 66551.0179 \\ \Delta X &= - 11251.1276 \end{aligned}$$

$$\alpha = 136^\circ - 57' - 22''$$

$$\beta = 246^\circ - 39' - 37''$$

$$\beta - \alpha = 89^\circ - 32' - 15''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 112.51386 \\ \Delta X \times \textcircled{4} &= 9123.27229 \\ E &= 125.78376 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 125.78376$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - 1123.17217 \\ X_1 &= - 66551.0179 \\ X &= - 6678.8106 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 1119.1993 \\ Y_1 &= - 34227.1449 \\ Y &= - 3417.3156 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 34227.1449 \\ Y_1 &= - 34227.1449 \\ \Delta Y &= - 0.0000 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= + 0.1921021051 \textcircled{1} \\ \text{Sin} \alpha &= 0.98174316 \textcircled{2} \\ \text{Cos} \beta &= 0.1319818151 \textcircled{3} \\ \text{Sin} \beta &= 0.9817401161 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - 0.19919967 \textcircled{5} \end{aligned}$$

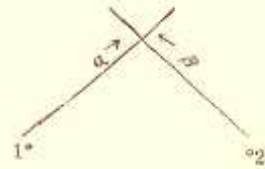
$$\begin{aligned} \Delta Y \times \textcircled{1} &= 0.11579913 \\ \Delta X \times \textcircled{2} &= 0.119.93308 \\ F &= 114.13395 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 114.13395$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - 1117.6429 \\ X_2 &= - 66810.1455 \\ X &= - 6678.8106 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - 1113.7791 \\ Y_2 &= - 34227.1449 \\ Y &= - 3417.3156 \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \\ X_1 &= - \\ \Delta X &= - \end{aligned}$$

$$\alpha =$$

$$\beta =$$

$$\beta - \alpha =$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= - \\ \Delta X \times \textcircled{4} &= - \\ E &= \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} =$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - \\ X_1 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - \\ Y_1 &= - \\ Y &= - \end{aligned}$$

$$\begin{aligned} Y_2 &= - \\ Y_1 &= - \\ \Delta Y &= - \end{aligned}$$

$$\text{Cos} \alpha = -$$

$$\text{Sin} \alpha = -$$

$$\text{Cos} \beta = -$$

$$\text{Sin} \beta = -$$

$$\text{Sin}(\beta - \alpha) = -$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= - \\ \Delta X \times \textcircled{2} &= - \\ F &= \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} =$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - \\ X_2 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - \\ Y_2 &= - \\ Y &= - \end{aligned}$$

12ブロック～15ブロック迄

変更除外のため

(14)

16

925

156~57~22-

933

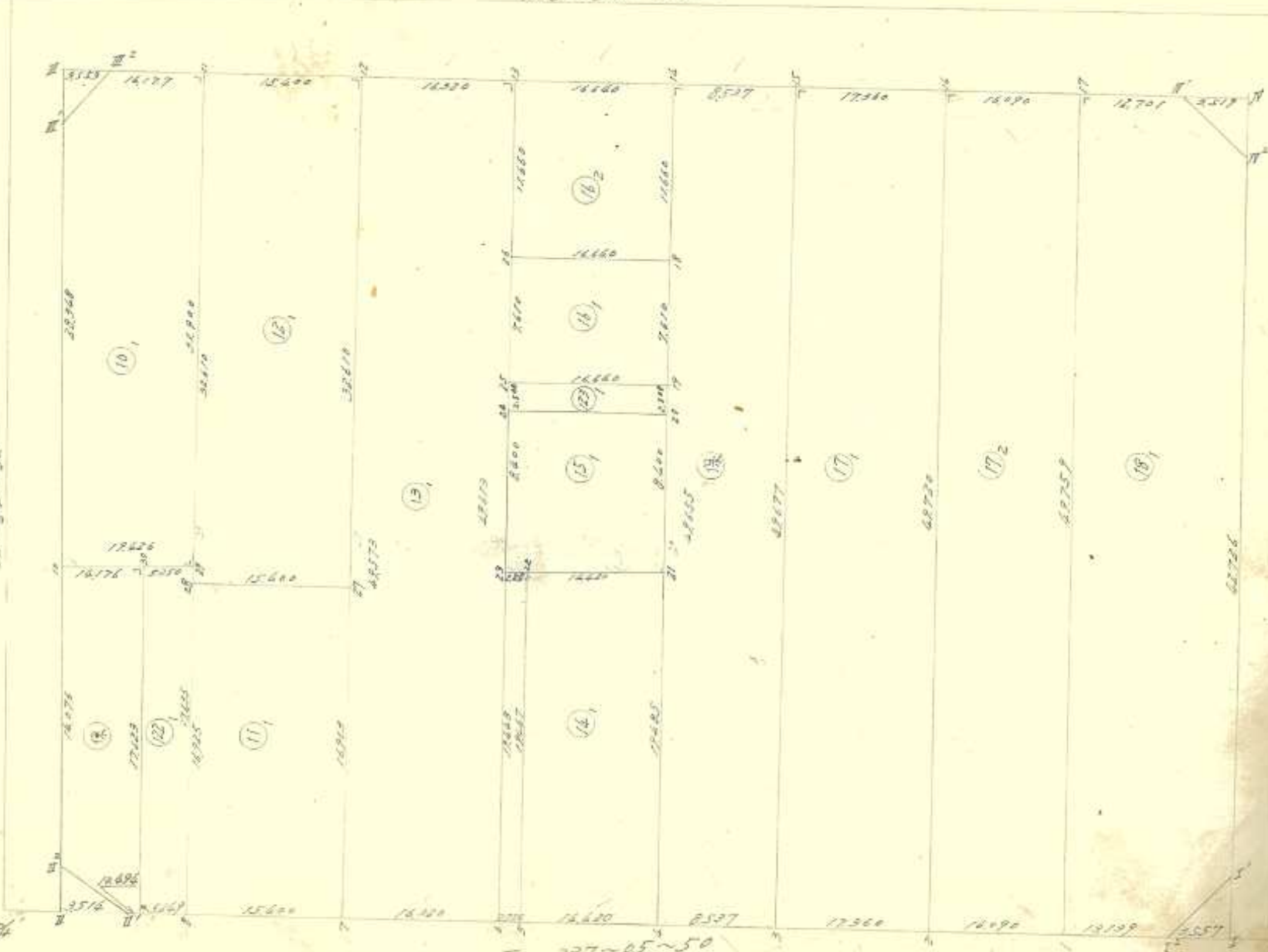
66~86~32-

924

337~45~50

361~46~32

932



各筆面積計算集計表

ブロック 番号	各筆確定			備 考	各筆 番号	各筆確定			備 考
	各 筆 号	面 積 m ²	積 坪			面 積 m ²	積 坪		
15	①	618 229	187 01						
	②	241 914	73 18						
	③	92 553	28 00						
	④	260 943	78 94						
	⑤	502 195	151 91						
	⑥	809 362	244 83						
	⑦	194 028	58 69						
	⑧	126 635	38 31						
	⑨	139 779	42 28						
	⑩	41 610	12 59						
	⑪	280 691	84 91						
	⑫	43 167	13 06	アビツク					
	⑬	423 977	128 25						
	⑭	862 773	261 00						
	⑮	800 306	242 09						
	⑯	806 748	244 04						
					計				
						m ²	坪		
						ブロック計算=	6201.706	ブロック計算=	1876.01
						各筆集計=	1201.723(-)	各筆集計=	1876.03(-)
						ε=	-0.37	ε=	.02

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	11	6,569.363	-	727.376	3,492.227	-	423.022	1,596.415		7,574.122	
筆番号	29	6,556.856	-	⊖5.399	3,482.873	-	+36.958	2,101.284			338.823
⑩	12	6,574.732	-	⊖29.221	3,455.269	-	⊖18.075		1,378.201		1,615.015
	925 ^Ⅱ	6,586.077	-	⊖9.498	3,481.248	-	⊖30.626		2,636.194		771.694
	925 ^Ⅲ	6,584.230	-	√6.734	3,485.895	-	⊖10.979		974.761	1,437.357	

控除シクル値

X = 於テ 6.500
Y = 於テ 3.400

$\Sigma = 3697.699$ $4,934.156$ $3,961.909$ $2,725.532$
 $\Sigma S = 1,236.457$ $1,236.457$
 $S = 618.229$
 187.0157

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	30	6,561.687	-	119.943	3,460.818	-	110.668	124.177		415.173	
筆番号	9	6,554.789	-	⊖7.768	3,444.601	-	+20.308	99.217			12.736
⑩	924 ^Ⅱ	6,564.455	-	⊖14.309	3,440.518	-	+2.235	32.249			7.412
	924 ^Ⅲ	6,569.098	-	⊖10.277	3,442.370	-	⊖14.751		281.715		24.356
	10	6,574.732	-	+7.411	3,455.269	-	⊖18.448		456.256	113.159	

控除シクル値

X = 於テ 6.550
Y = 於テ 3.440

$\Sigma = 754.143$ 737.971 578.332 44.504
 $\Sigma S = 483.828$ 483.828
 $S = 241.914$
 73.1877

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16 筆番号 ⑫	29	6556.856	-	+11.734	3462.873	-	+14.174	238,917	,	268,392	,
	8	6549.953	-	+2.067	3446.644	-	+18.272	181,861	,	13,733	,
	9	6556.789	-	⊖11.734	3464.601	-	⊖14.174	,	209,619	,	53,988
	30	6561.687	-	⊖2.067	3460.818	-	⊖18.272	,	396,265	,	43,131

控除シタル値

X = 於テ 6540

y = 於テ 3440

$\Sigma = 420 \quad 770 \quad 605 \quad 884 \quad 282 \quad 125 \quad 97 \quad 019$

$\Sigma S = 185.106 \quad 185.106$

S = 92.553

28.00574^年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16 筆番号 ⑩	27	6542.407	-	+20.811	3468.247	-	+9.582	118,884	,	587,848	,
	7	6535.767	-	⊖7.546	3452.637	-	+21.603	124,585	,	,	95,359
	8	6549.953	-	⊖20.811	3446.644	-	⊖9.582	,	191,190	,	138,268
	28	6556.578	-	+7.546	3462.219	-	⊖21.603	,	574,165	167,665	,

控除シタル値

X = 於テ 6530

y = 於テ 3440

$\Sigma = 243 \quad 469 \quad 765 \quad 355 \quad 755 \quad 513 \quad 233 \quad 627$

$\Sigma S = 521.886 \quad 521.886$

S = 260.943

78.94574^年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	筆番号										
	12	6,555.170	-	+ 26.936	3,498.255	-	+ 26.980	363.825		10,30.497	
	27	6,542.407	-	⊖ 1.406	3,468.247	-	+ 36.036	86.739			11,595
	28	6,556.578	-	⊖ 26.936	3,462.219	-	⊖ 26.980		397.540		59,771
	11	6,569.343	-	+ 1.416	3,492.227	-	⊖ 36.036		1,057.404	45.311	
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値

X = 於テ 6,540
 y = 於テ 3,460

$\Sigma = 450,564$ $\Sigma X = 1254.944$ $\Sigma Y = 1075.747$ $\Sigma Z = 71.361$

$2S = 1,004.390$ $1,004.391$

S = 502.195

151.91 ± 坪

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	筆番号										
	13	6,540.154	-	+ 34.430	3,504.643	-	+ 39.266	791.367		1,881.796	
	6	6,520.734	-	+ 4.387	3,458.989	-	+ 57.006	39.170		39.435	
	7	6,535.767	-	⊖ 34.430	3,452.637	-	⊖ 39.266		619.107		90,813
	12	6,555.170	-	⊖ 4.387	3,498.255	-	⊖ 57.006		1,029.155		211,695
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値

X = 於テ 6,520
 y = 於テ 3,450

$\Sigma = 879,537$ $\Sigma X = 2,449.368$ $\Sigma Y = 1,921.231$ $\Sigma Z = 306,508$

$2S = 1,610.723$ $1,610.723$

S = 809.362

244.83 ± 坪

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
16	筆番号	20	6516.349	-	718.668	3295.559	-	+	7.685		298,000	
	(15)	21	6513.032	-	712.626	3489.893	-	+	14.244			1881,637
		23	6528.344	-	718.668	3478.879	-	⊖	1.216		22,294	187,949
		24	6537.632	-	712.624	3484.609	-	⊖	14.244		22,294	2175,259

控除シクル値

X=於テ 6510

y=於テ 3470

$$\sum = \frac{150.872}{28} = 279.561$$

$$S = \frac{1239.779}{42.2854} = 29.31$$

42.2854 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
16	筆番号	19	6517.211	-	716.291	3475.444	-	⊖	4.213		26,751	281,600
	(12)	20	6516.320	-	712.333	3497.223	-	+	8.815		35,711	1362,952
		24	6527.154	-	716.291	3484.609	-	+	4.213		37,936	157,975
		25	6528.415	-	714.333	3494.918	-	⊖	8.815		199,216	226,577

控除シクル値

X=於テ 6510

y=於テ 3470

$$\sum = \frac{146.847}{28} = 83.220$$

$$S = \frac{41.610}{12.5954} = 3.31$$

12.5954 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16											
筆番号	21	6513.032	-	+ 20.996 3483.393	-	-	+ 12.284	160,086	,	1742.590	,
⑭	4	6505.405	-	⊖ 5.657 3465.464	-	-	+ 23.540	127,734	,	,	370,990
	5	6518.689	-	⊖ 20.996 3459.853	-	-	⊖ 12.284	,	229,576	,	1850,100
	22	6526.301	-	+ 5.657 3477.748	-	-	⊖ 23.540	,	619,126	439,820	,

控除シタル値

X = 於テ 6.500

y = 於テ 3.400

$$\Sigma = 287,319,248,708,3182,400,1531,218$$

$$2S = 561,383$$

$$561,382$$

$$S = 280,691$$

94.91年

年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16											
筆番号	22	6526.301	-	+ 9.655 3477.748	-	-	+ 17.026	447,801	,	750,657	,
⑮	5	6518.689	-	+ 5.567 3459.853	-	-	+ 12.759	350,587	,	333,206	,
	6	6520.734	-	⊖ 9.655 3458.989	-	-	⊖ 17.026	,	353,017	,	569,539
	23	6528.346	-	⊖ 5.567 3476.879	-	-	⊖ 12.759	,	531,705	,	487,986

控除シタル値

X = 於テ 6.500

y = 於テ 3.400

$$\Sigma = 799,308,894,722,1083,959,997,524$$

$$2S = 96,334$$

$$96,335$$

$$S = 48,167$$

13.06年

年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16 筆番号 ㊦	15	6516.987	-	727.300	3514.500	-	142.370	1143.429		1487.850	
	3	6497.542	-	11.582	3468.787	-	149.036	369.830		101.771	
	4	6505.405	-	927.300	3465.464	-	922.370		652.710		149.167
	14	6524.842	-	911.582	3511.157	-	949.036		1708.518		592.500

控除シタル値

Xニ於テ 6490

yニ於テ 3460

$\Sigma = 1513 \ 269 \ 2361 \ 222 \ 1589 \ 621 \ 741 \ 667$

$2S = 847.953 \quad 847.954$

$S = 423.977$

120.25坪 年 月 日

面積計算用紙

街廓番号	NO	X_n	$X_n - X_{n+1}$	$\Delta X + \Delta X_{n+1}$	Y_n	$Y_n - Y_{n+1}$	$\Delta y_n + \Delta y_{n+1}$	(1) × (6)		(3) × (4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ○											

控除シタル値

Xニ於テ

yニ於テ

$\Sigma =$

$2S =$

$S =$

年 月 日

面積計算用紙

街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	16	6501.012	-	+35.437	3521.295	-	+38.957	918.564		2192.111	
筆番号 ①	2	6481.550	-	+3.470	3475.543	-	+52.508	81.397		53.934	
	3	6497.566	-	⊖35.437	3458.787	-	⊖38.957		683.394		311.395
	15	6576.987	-	⊖3.470	3514.500	-	⊖52.508		1942.113		189.115
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値

X = 於テ 6.480
y = 於テ 3.460

$\Sigma = 299.951$ $2.675.597$ 2276.045 500.500
 $\Sigma S = 1725.546$ 1725.545
 $S = 968.773$
 761.00坪 年 月 日

面積計算用紙

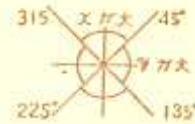
街廓番号	NO	Xn	Xn-Xn+1	ΔX+ΔXn+1	Yn	Yn-Yn+1	Δyn+Δyn+1	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
16	17	6486.206	-	+34.284	3527.593	-	+39.491	1429.811		2660.198	
筆番号 ②	1	6466.728	-	+4.656	3481.804	-	+52.050	870.692		148.979	
	2	6481.550	-	⊖34.284	3475.543	-	⊖39.491		1245.941		875.716
	16	6501.012	-	⊖4.656	3521.395	-	⊖52.050		2655.174		339.950
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					
			-			-					

控除シタル値
X = 於テ 6.450
y = 於テ 3.450

$\Sigma = 2300.593$ 3901.115 2808.277 1207.666
 $\Sigma S = 1600.612$ 1600.611
 $S = 800.306$
 242.09坪 年 月 日

多角点計算用紙

測量No. 1



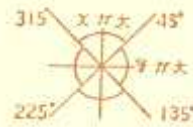
象限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	Cos	N (+)	S (-)	E (+)	W (-)	X	Y	
	932 ^I	"		"	.			.	.	.	.	6451.349	3488.302	932 ^I
932 ^I	932 ^I			337°05'50"	3.557	389169	921167	.	.	.	.	6454.626	3486.918	932 ^I
932 ^I	1			"	13.139	.	.	.	.	.	.	6466.728	3481.804	1
1	2			"	16.090	.	.	.	.	.	.	6481.550	3475.543	2
2	3			"	17.960	.	.	.	.	.	.	6497.542	3468.787	3
3	4			"	8.537	.	.	.	.	.	.	6505.405	3465.466	4
4	5	119°22'9"		"	14.420	.	.	.	.	.	.	6518.689	3459.853	5
5	6			"	2.220	.	.	.	.	.	.	6520.734	3458.989	6
6	7			"	16.320	.	.	.	.	.	.	6535.767	3452.637	7
7	8			"	15.400	.	.	.	.	.	.	6549.953	3446.646	8
8	9			"	5.269	.	.	.	.	.	.	6554.789	3444.601	9
9	926 ^{II}			"	10.494	.	.	.	.	.	.	6564.455	3440.518	926 ^{II}
926 ^{II}	926 ^{II}			"	3.514	.	.	.	.	.	.	6567.692	3439.150	926 ^{II}
926 ^{II}	926 ^{II}			66°24'32"	3.514	400216	916421	.	.	.	.	6569.098	3442.370	926 ^{II}
926 ^{II}	10			"	14.076	.	.	.	.	.	.	6574.732	3435.289	10
10	925 ^{III}	42°42'4"		"	28.348	.	.	.	.	.	.	6586.077	3481.268	925 ^{III}
925 ^{III}	925 ^{III}			"	3.553	.	.	.	.	.	.	6587.499	3484.506	925 ^{III}
925 ^{III}	925 ^{III}			156°57'22"	3.553	391465	920201	.	.	.	.	6584.230	3485.895	925 ^{III}
925 ^{III}	11			"	16.177	.	.	.	.	.	.	6569.343	3492.227	11
11	12			"	15.400	.	.	.	.	.	.	6555.178	3498.255	12
12	13			"	16.320	.	.	.	.	.	.	6540.156	3504.643	13
13	14	119°22'5"		"	16.640	.	.	.	.	.	.	6526.842	3511.157	14
14	15			"	8.537	.	.	.	.	.	.	6516.987	3514.500	15

協和建設測量

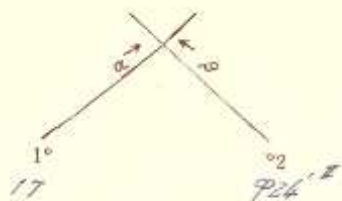
多角点計算用紙

測量No. _____



測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	Cos	N (+)	S (-)	E (+)	W (-)	X	Y	
	925 ^{II}											6587.499	3484.504	925 ^{II}
925 ^{II}	11			156 57 22	19.730	391445	920201	18.156	7.723			6569.343	3492.227	11
11	29			246 57 22	31.900	"	"	12.487		29.354	6556.856	3462.872	29	
29	30			336 57 22	5.250	"	"	4.831		2.435	6561.487	3460.818	30	
11	12			156 57 22	15.400	"	"	14.171	6.028			6555.172	3498.255	12
12	13			"	16.320	"	"	15.018	6.388			6540.154	3506.643	13
13	14			"	16.640	"	"	15.312	6.514			6526.842	3511.157	14
	11											6569.343	3492.227	11
11	28			246 57 22	32.610	391445	920201	12.765		30.008	6556.578	3462.219	28	
28	27			156 57 22	15.400	"	"	14.171	6.028			6542.407	3468.267	27
	13											6540.154	3506.643	13
13	26			246 57 22	11.660	391445	920201	4.564		10.730	6535.590	3493.913	26	
26	18			156 57 22	16.640	"	"	15.312	6.514			6520.278	3506.427	18
18	19			246 57 22	7.610	"	"	2.979		7.003	6517.299	3493.424	19	
19	25			336 57 22	16.640	"	"	15.312		6.514	6532.611	3486.910	25	
25	24			246 57 22	12.500	"	"	3.979		2.801	6537.622	3494.698	24	
24	20			156 57 22	16.640	"	"	15.312	1.514			6516.369	3494.123	20
20	21			246 57 22	8.400	"	"	3.888		7.796	6513.032	3483.393	21	
21	22			336 57 22	14.420	"	"	13.269		5.645	6526.301	3477.748	22	
22	23			"	2.220	"	"	2.043		8.619	6528.344	3476.877	23	

算出点 1



$$\begin{aligned} 926 X_2 &= -65671.6192 \\ 17 X_1 &= -64861.2106 \\ \hline \Delta X &= -11891.4186 \end{aligned}$$

$$a = 926^\circ - 57' - 52''$$

$$\beta = 257^\circ - 65' - 50''$$

$$\beta - a = 190^\circ - 68' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +181.47077 \\ \Delta X \times \textcircled{4} &= +181.71183 \\ \hline E &= 189.75894 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 189.75197$$

$$\begin{aligned} S_1 \times \textcircled{1} &= (-) 11891.478 \\ X_1 &= -64861.2106 \\ \hline X &= -64661.728 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= 0 1451.789 \\ Y_1 &= -35871.5193 \\ \hline Y &= -34871.804 \end{aligned}$$

$$\begin{aligned} Y_2 &= -34391.11510 \\ Y_1 &= -35271.5193 \\ \hline \Delta Y &= -21880.4043 \end{aligned}$$

$$\text{Cos } \alpha = 0.159176361 \textcircled{1}$$

$$\text{Sin } \alpha = 0.192102155 \textcircled{2}$$

$$\text{Cos } \beta = 0.192171671 \textcircled{3}$$

$$\text{sin } \beta = +.13189216191 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = -.199999971 \textcircled{5}$$

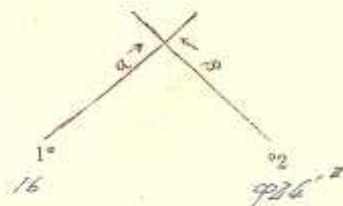
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +181.61977 \\ \Delta X \times \textcircled{2} &= 0 184.96380 \\ \hline F &= 189.188359 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 189.161039$$

$$\begin{aligned} S_2 \times \textcircled{3} &= 0 1201.963 \\ X_2 &= -64671.678 \\ \hline X &= -64661.728 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 1451.6546 \\ Y_2 &= -34391.11510 \\ \hline Y &= -34871.804 \end{aligned}$$

算出点 2



$$\begin{aligned} 926 X_2 &= -65671.6192 \\ 16 X_1 &= -65011.0112 \\ \hline \Delta X &= -11661.2880 \end{aligned}$$

$$a = 111^\circ - 1' - 1''$$

$$\beta = 117^\circ - 1' - 1''$$

$$\beta - a = 111^\circ - 1' - 1''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +175.188826 \\ \Delta X \times \textcircled{4} &= +125.96979 \\ \hline E &= 149.71967 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{5}} = 149.71196$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - 11891.4682 \\ X_1 &= -65011.0112 \\ \hline X &= -64811.550 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 1451.752 \\ Y_1 &= -35271.6195 \\ \hline Y &= -34775.5423 \end{aligned}$$

$$\begin{aligned} Y_2 &= -34391.11510 \\ Y_1 &= -35271.6195 \\ \hline \Delta Y &= -21880.5045 \end{aligned}$$

$$\text{Cos } \alpha = -.111111111 \textcircled{1}$$

$$\text{Sin } \alpha = -.111111111 \textcircled{2}$$

$$\text{Cos } \beta = -.111111111 \textcircled{3}$$

$$\text{sin } \beta = -.111111111 \textcircled{4}$$

$$\text{Sin}(\beta - \alpha) = -.111111111 \textcircled{5}$$

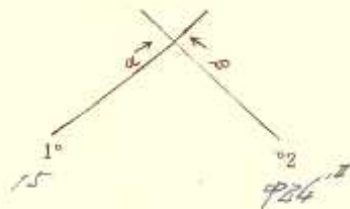
$$\begin{aligned} \Delta Y \times \textcircled{4} &= +137.175291 \\ \Delta X \times \textcircled{2} &= 0 161.125927 \\ \hline F &= 193.51278 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 193.51141$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - 1186.17612 \\ X_2 &= -64671.6192 \\ \hline X &= -64811.550 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - 1316.12913 \\ Y_2 &= -34391.11510 \\ \hline Y &= -34775.5423 \end{aligned}$$

算出点 3



$$\begin{aligned} 926 X_2 &= -656171.1692 \\ 15 X_1 &= -651181.1987 \\ \Delta X &= -1150.0295 \end{aligned}$$

$$\alpha = 226^\circ - 57' - 22''$$

$$\beta = 157^\circ - 25' - 50''$$

$$\beta - \alpha = 190^\circ - 08' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +189.40993 \\ \Delta X \times \textcircled{4} &= +1191.73291 \\ E &= 149.87772 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 49.87773$$

$$\begin{aligned} S_1 \times \textcircled{1} &= -1191.73291 \\ X_1 &= -656171.1692 \\ X &= -64917.5422 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= -1191.73291 \\ Y_1 &= -351181.1987 \\ Y &= -34619.8997 \end{aligned}$$

$$\begin{aligned} Y_2 &= -346191.17510 \\ Y_1 &= -351181.19870 \\ \Delta Y &= -1761.350 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0.1911111111 \textcircled{1} \\ \text{Sin} \alpha &= 0.1911111111 \textcircled{2} \\ \text{Cos} \beta &= 0.1911111111 \textcircled{3} \\ \text{Sin} \beta &= +0.1911111111 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.1911111111 \textcircled{5} \end{aligned}$$

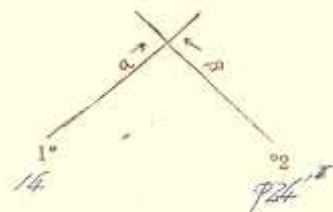
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +189.40993 \\ \Delta X \times \textcircled{2} &= -1191.73291 \\ F &= 189.40993 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 76.17510$$

$$\begin{aligned} S_2 \times \textcircled{3} &= -1191.73291 \\ X_2 &= -656171.1692 \\ X &= -64917.5422 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +1191.73291 \\ Y_2 &= -346191.17510 \\ Y &= -34619.8997 \end{aligned}$$

算出点 4



$$\begin{aligned} 926 X_2 &= -656171.1692 \\ 14 X_1 &= -651241.1842 \\ \Delta X &= -11621.01510 \end{aligned}$$

$$\alpha = 111^\circ - 11' - 11''$$

$$\beta = 111^\circ - 11' - 11''$$

$$\beta - \alpha = 111^\circ - 11' - 11''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +160.1390417 \\ \Delta X \times \textcircled{4} &= +1161.167509 \\ E &= 169.185458 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 149.185417$$

$$\begin{aligned} S_1 \times \textcircled{1} &= -1161.167509 \\ X_1 &= -656171.1692 \\ X &= -64015.1405 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= -1161.167509 \\ Y_1 &= -351181.1987 \\ Y &= -34615.1405 \end{aligned}$$

$$\begin{aligned} Y_2 &= -346191.17510 \\ Y_1 &= -351181.19870 \\ \Delta Y &= -1761.35017 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= -0.1911111111 \textcircled{1} \\ \text{Sin} \alpha &= -0.1911111111 \textcircled{2} \\ \text{Cos} \beta &= -0.1911111111 \textcircled{3} \\ \text{Sin} \beta &= -0.1911111111 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= -0.1911111111 \textcircled{5} \end{aligned}$$

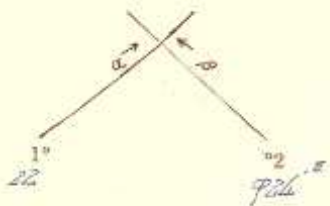
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +160.1390417 \\ \Delta X \times \textcircled{2} &= -1161.167509 \\ F &= 167.161171 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{5}} = 167.161171$$

$$\begin{aligned} S_2 \times \textcircled{3} &= -1161.167509 \\ X_2 &= -656171.1692 \\ X &= -64015.1405 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= -1161.167509 \\ Y_2 &= -346191.17510 \\ Y &= -34615.1405 \end{aligned}$$

算出点 5



$$\begin{aligned} 926^{\circ} X_2 &= - 6151671 \cdot 16192 \\ 22 X_1 &= - 6152261 \cdot 13101 \\ \Delta X &= - 11461 \cdot 13191 \end{aligned}$$

$$\alpha = 246^{\circ} - 57' - 22''$$

$$\beta = 157^{\circ} - 25' - 15''$$

$$\beta - \alpha = 190^{\circ} - 08' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11251 \cdot 151520 \\ \Delta X \times \textcircled{4} &= + 1161 \cdot 110180 \\ E &= 1179 \cdot 44019 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 1179 \cdot 16172$$

$$\begin{aligned} S_1 \times \textcircled{1} &= + 1117 \cdot 1612 \\ X_1 &= - 6152261 \cdot 13101 (+) \\ X &= - 6151181 \cdot 16182 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= + 1117 \cdot 18115 \\ Y_1 &= - 342771 \cdot 17468 (+) \\ Y &= - 342591 \cdot 18153 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 342391 \cdot 11510 \\ Y_1 &= - 3417171 \cdot 17468 (-) \\ \Delta Y &= - 911381 \cdot 15198 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 0 \cdot 11111111 \textcircled{1} \\ \text{Sin} \alpha &= 9 \cdot 11111111 \textcircled{2} \\ \text{Cos} \beta &= 9 \cdot 11111111 \textcircled{3} \\ \text{Sin} \beta &= + \cdot 11111111 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - \cdot 11111111 \textcircled{5} \end{aligned}$$

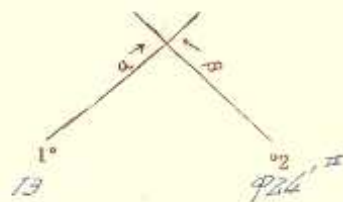
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 11251 \cdot 161865 \\ \Delta X \times \textcircled{2} &= 911381 \cdot 108821 (-) \\ F &= 11531 \cdot 119686 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 1531 \cdot 1191710$$

$$\begin{aligned} S_2 \times \textcircled{3} &= + 11491 \cdot 10103 \\ X_2 &= - 6151671 \cdot 16192 (+) \\ X &= - 6151181 \cdot 16182 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= + 11201 \cdot 17103 \\ Y_2 &= - 342391 \cdot 11510 (+) \\ Y &= - 342591 \cdot 18153 \end{aligned}$$

算出点 6



$$\begin{aligned} 926^{\circ} X_2 &= - 6151671 \cdot 16192 \\ 13 X_1 &= - 6156101 \cdot 11561 \\ \Delta X &= - 11271 \cdot 15138 \end{aligned}$$

$$\alpha = 246^{\circ} - 57' - 22''$$

$$\beta = 157^{\circ} - 64' - 15''$$

$$\beta - \alpha = 190^{\circ} - 08' - 28''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= + 11610 \cdot 132990 \\ \Delta X \times \textcircled{4} &= + 1120 \cdot 121680 \\ E &= 1129 \cdot 611392 \end{aligned}$$

$$S_1 = \left| \frac{E}{\textcircled{5}} \right| = 1291 \cdot 161130$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - 11191 \cdot 14210 \\ X_1 &= - 6156101 \cdot 11561 (+) \\ X &= - 615201 \cdot 7192 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - 11201 \cdot 16152 \\ Y_1 &= - 34201 \cdot 1643 (+) \\ Y &= - 34258 \cdot 1909 \end{aligned}$$

$$\begin{aligned} Y_2 &= - 342391 \cdot 11510 \\ Y_1 &= - 3450161 \cdot 16143 (-) \\ \Delta Y &= - 911651 \cdot 14193 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 9 \cdot 1319112361 \textcircled{1} \\ \text{Sin} \alpha &= 0 \cdot 1921012105 \textcircled{2} \\ \text{Cos} \beta &= 0 \cdot 192111167 \textcircled{3} \\ \text{Sin} \beta &= + \cdot 1381911617 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - \cdot 19999997 \textcircled{5} \end{aligned}$$

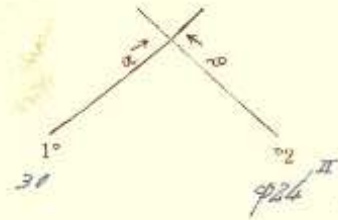
$$\begin{aligned} \Delta Y \times \textcircled{1} &= + 11251 \cdot 136132 \\ \Delta X \times \textcircled{2} &= 0 \cdot 1851 \cdot 132061 (-) \\ F &= 11501 \cdot 197171 \end{aligned}$$

$$S_2 = \left| \frac{F}{\textcircled{5}} \right| = 1501 \cdot 197171$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - 11410 \cdot 19158 \\ X_2 &= - 6156171 \cdot 16192 (+) \\ X &= - 615201 \cdot 7192 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - 11191 \cdot 18139 \\ Y_2 &= - 342391 \cdot 11510 (+) \\ Y &= - 34258 \cdot 1909 \end{aligned}$$

算出点 9



$$\begin{aligned} X_2 &= -655671.06192 \\ X_1 &= -655671.06192 \\ \Delta X &= -1161.01015 \end{aligned}$$

$$\alpha = 126^\circ - 57' - 22''$$

$$\beta = 157^\circ - 45' - 50''$$

$$\beta - \alpha = 190^\circ - 08' - 28''$$

$$\begin{aligned} Y_2 &= -344391.12510 \\ Y_1 &= -344610.18118 \\ \Delta Y &= +21219.05608 \end{aligned}$$

$$\text{Cos } \alpha = 0.1911111111 \text{ ①}$$

$$\text{Sin } \alpha = 0.1921021015 \text{ ②}$$

$$\text{Cos } \beta = 0.1921111111 \text{ ③}$$

$$\text{Sin } \beta = +0.1919999999 \text{ ④}$$

$$\text{Sin}(\beta - \alpha) = -0.1919999999 \text{ ⑤}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1119.191999999 \\ \Delta X \times \text{④} &= +1161.0101015 \\ E &= 1171.06192 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1171.06192$$

$$\begin{aligned} S_1 \times \text{①} &= 0 \\ X_1 &= -655671.06192 \\ X &= -655555.05180 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -344610.18118 \\ Y &= -344418.12510 \end{aligned}$$

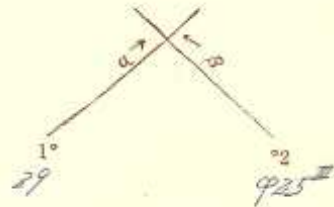
$$\begin{aligned} \Delta Y \times \text{①} &= +1161.0101015 \\ \Delta X \times \text{②} &= 0 \\ F &= 1161.0101015 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} = 1161.0101015$$

$$\begin{aligned} S_2 \times \text{③} &= 0 \\ X_2 &= -655671.06192 \\ X &= -655555.05180 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= + \\ Y_2 &= -344391.12510 \\ Y &= -344418.12510 \end{aligned}$$

算出点 10



$$\begin{aligned} X_2 &= -655871.06199 \\ X_1 &= -655561.05561 \\ \Delta X &= -3110.00638 \end{aligned}$$

$$\alpha = 126^\circ - 57' - 22''$$

$$\beta = 126^\circ - 57' - 22''$$

$$\beta - \alpha = 180^\circ - 00' - 00''$$

$$\begin{aligned} \Delta Y \times \text{③} &= 0 \\ \Delta X \times \text{④} &= 0 \\ E &= 1119.191999999 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1119.191999999$$

$$\begin{aligned} S_1 \times \text{①} &= + \\ X_1 &= -655561.05561 \\ X &= -655772.25200 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= 0 \\ Y_1 &= -344610.18118 \\ Y &= -344551.26700 \end{aligned}$$

$$\begin{aligned} Y_2 &= -344610.18118 \\ Y_1 &= -344610.18118 \\ \Delta Y &= 0 \end{aligned}$$

$$\text{Cos } \alpha = 0.1911111111 \text{ ①}$$

$$\text{Sin } \alpha = 0.1921021015 \text{ ②}$$

$$\text{Cos } \beta = 0.1921111111 \text{ ③}$$

$$\text{Sin } \beta = 0.1919999999 \text{ ④}$$

$$\text{Sin}(\beta - \alpha) = -0.1919999999 \text{ ⑤}$$

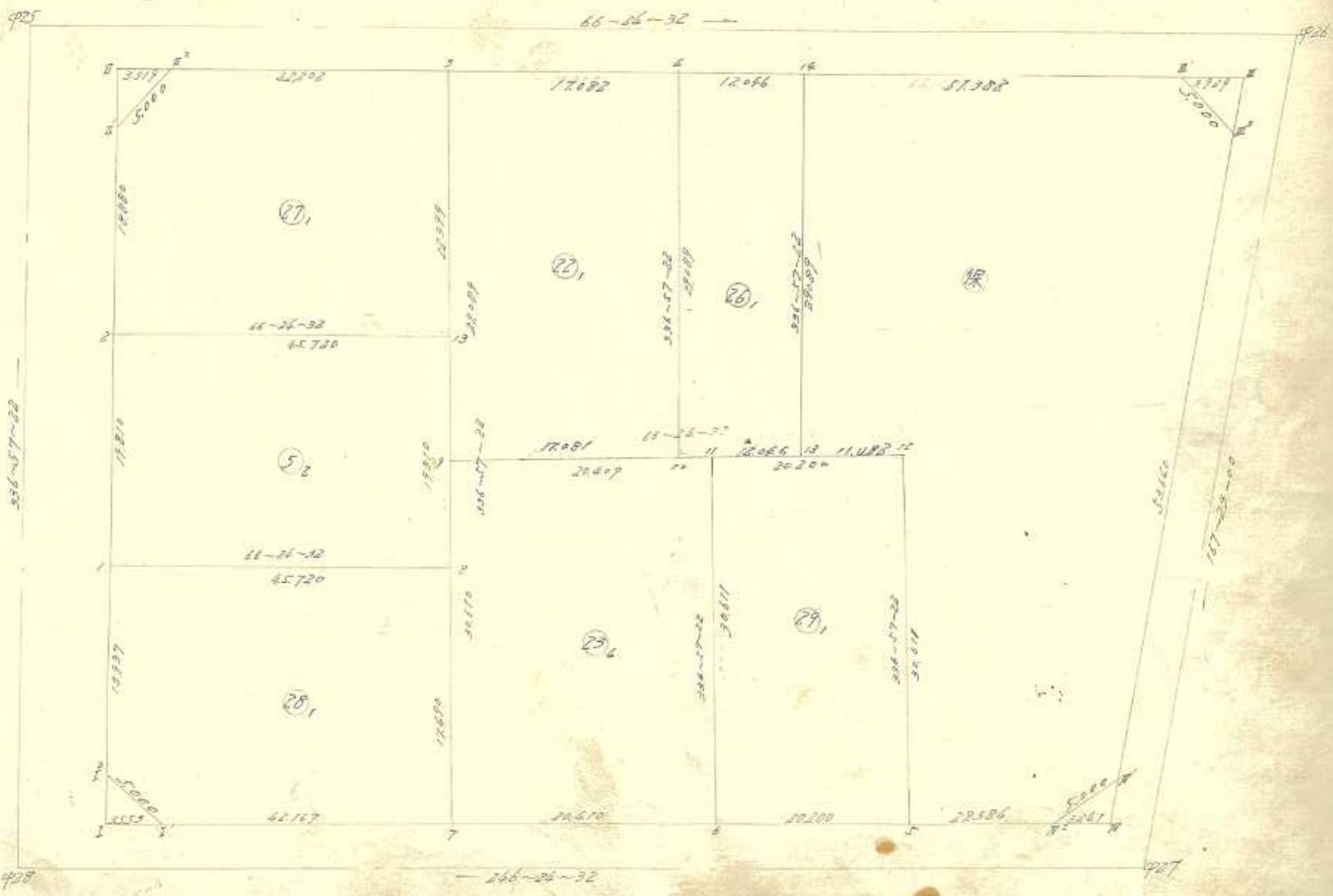
$$\begin{aligned} \Delta Y \times \text{①} &= +1119.191999999 \\ \Delta X \times \text{②} &= 0 \\ F &= 1119.191999999 \end{aligned}$$

$$S_2 = \frac{F}{\text{⑤}} = 1119.191999999$$

$$\begin{aligned} S_2 \times \text{③} &= 0 \\ X_2 &= -655871.06199 \\ X &= -655772.25200 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0 \\ Y_2 &= -344610.18118 \\ Y &= -344551.26700 \end{aligned}$$

17



面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 201	7	6557.265	-	+ 32.969	3566.636	-	+ 31.797	1820.855			2126.390
	928 ¹	6560.390	-	+ 15.028	3525.793	-	+ 43.290	1768.483			387.617
	928 ²	6542.237	-	0 14.672	3521.146	-	+ 10.102	486.678			310.254
	1	6555.062	-	0 31.122	3515.691	-	0 36.664	2006.680			688.335
	8	6573.359	-	0 2.203	3557.590	-	0 48.765	3575.886			126.871

控除シクル値

X = 於テ 6.500-

y = 於テ 3.470-

$$\sum = 3996.016 \quad 5582.564 \quad 2512.007 \quad 925.660$$

$$28 = 1586.568 \quad 1586.567$$

$$S = 793.274$$

印
年 月 日

239.97⁰⁹

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 512	1	6555.062	-	+ 36.068	3515.691	-	+ 49.653	2733.993			1.067
	2	6573.291	-	0 36.526	3507.937	-	0 36.165	2502.521			289.907
	13	6591.588	-	0 36.068	3569.826	-	0 49.653	6567.619			3.389
	8	6573.359	-	+ 36.526	3557.590	-	+ 36.165	2506.863			2103.532

控除シクル値

X = 於テ

y = 於テ

$$\sum = 5738.836 \quad 7650.140 \quad 2106.599 \quad 293.896$$

$$28 = 1811.306 \quad 1811.303$$

$$S = 905.658$$

印
年 月 日

273.96⁰⁹

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②①	13	6591.588	-	+ 38.910	3549.836	-	+ 33.131	3036.402		1939.119	
	2	6573.291	-	+ .923	3507.937	-	+ 49.291	3612.587		7.325	
	925 ^上	6590.665	-	0 22.070	3500.565	-	+ 5.566	502.647			12.001
	925 ^中	6595.311	-	0 21.536	3502.393	-	0 40.523		3862.288		51.536
	3	6612.201	-	+ 3.723	3541.068	-	0 47.663		5323.152	152.896	

控除シタル値

X = 於テ 6500

y = 於テ 3500

$\Sigma = 2169.636$ 9185.660 2099.360 63.537

$2S = 2035.806$ 2035.803

S = 1017.902

307.92^年 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ②②	3	6612.201	-	0 33.604	3541.068	-	0 4.267		478.742		1380.049
	4	6619.037	-	+ 19.932	3556.722	-	0 27.040		3218.740	1130.583	
	10	6592.269	-	+ 33.604	3568.102	-	+ 4.267	893.712		2288.701	
	9	6585.433	-	0 19.932	3552.455	-	+ 27.640	2310.108			1045.533

控除シタル値

X = 於テ 6500

y = 於テ 3500

$\Sigma = 2763.820$ 3697.522 3419.284 2425.582

$2S = 993.702$ 993.702

S = 496.851

150.30^年 年 月 日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)		
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-	
筆番号 ⑤	927 ^Ⅰ	6585.357	-	+16.300	3628.763	-	+29.373	2507.191			2098.837	
	5	6573.517	-	+18.328	3601.652	-	+39.093	2876.000			1659.776	
	12	6601.685	-	+23.573	3589.670	-	+22.565	2288.421			2153.791	
	13	6597.090	-	+22.173	3579.149	-	+27.909	2127.143			1754.926	
	14	6623.858	-	+47.333	3567.761	-	0.35703		4421.978		3207.331	
	926 ^Ⅱ	6640.423	-	+18.303	3614.869	-	+57.547		7444.572		2162.181	
	926 ^Ⅲ	6642.161	-	+54.606	3619.308	-	0.16476		2299.596	6514.933		
	927 ^Ⅱ	6589.817	-	+56.806	3631.025	-	0.9455		869.220	7642.744		

控除シタル値

X=於テ 6500

y=於テ 3500

$$\sum = 19796.727 \quad 15015.386 \quad 16056.514 \quad 10837.703$$

$$2S = 5218.808$$

$$5218.811$$

$$S = 2609.305$$

789.31[㊦]

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ⑤	12	6597.090	-	+21.589	3579.147	-	0.347			21460	920.725
	10	6592.269	-	+21.947	3568.108	-	+22.425	50.882			397.416
	4	6619.037	-	+21.589	3556.722	-	+0.347	10.076			212.341
	14	6623.858	-	+21.947	3567.761	-	0.22425		759.266		389.801

控除シタル値

X=於テ 6590

y=於テ 3550

$$\sum = 60.958 \quad 761.726 \quad 1210.526 \quad 609.757$$

$$2S = 700.768$$

$$700.769$$

$$S = 350.384$$

106.0[㊦]

多角点計算用紙

測量No.

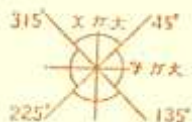


象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正 角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	928 ^I	"		"	.	.	.	.	.	.	.	6538.968	3522.537	928 ^I
928 ^I	928 ^{I'}			336.5722	3.553	391645	920201	.	.	.	.	6542.237	3521.146	928 ^{I'}
928 ^{I'}	1			"	13.937	.	.	.	.	.	.	6555.062	3515.691	1
1	2	52.627		"	19.810	.	.	.	.	.	.	6573.291	3507.937	2
2	925 ^{I'}			"	18.880	.	.	.	.	.	.	6590.665	3500.545	925 ^{I'}
925 ^{I'}	925 ^{II}			"	3.519	.	.	.	.	.	.	6593.903	3499.168	925 ^{II}
925 ^{II}	925 ^{II'}			66.2632	3.519	400216	916421	.	.	.	.	6595.311	3502.393	925 ^{II'}
925 ^{II'}	3			"	42.202	.	.	.	.	.	.	6612.201	3541.068	3
3	4	122.712		"	17.082	.	.	.	.	.	.	6619.037	3556.722	4
4	14			"	12.946	.	.	.	.	.	.	6627.858	3567.761	14
14	926 ^{III}			"	51.388	.	.	.	.	.	.	6644.423	3614.849	926 ^{III}
926 ^{III}	926 ^{III'}			"	3.929	.	.	.	.	.	.	6645.995	3618.450	926 ^{III'}
926 ^{III'}	926 ^{III''}			167.2300	3.929	218427	975853	.	.	.	.	6642.161	3619.308	926 ^{III''}
926 ^{III''}	927 ^{IV}			"	53.640	.	.	.	.	.	.	6589.817	3631.025	927 ^{IV}
927 ^{IV}	927 ^{IV'}			"	3.261	.	.	.	.	.	.	6586.654	3631.733	927 ^{IV'}
927 ^{IV'}	927 ^{IV''}			246.2632	3.261	400216	916421	.	.	.	.	6585.357	3628.763	927 ^{IV''}
927 ^{IV''}	5			"	29.586	.	.	.	.	.	.	6573.517	3601.658	5
5	6			"	20.200	.	.	.	.	.	.	6565.433	3583.140	6
6	7	112.361		"	20.410	.	.	.	.	.	.	6557.265	3564.436	7
7	928 ^{I'}			"	42.167	.	.	.	.	.	.	6540.390	3525.793	928 ^{I'}
928 ^{I'}	928 ^I			"	3.553	.	.	.	.	.	.	6538.968	3522.537	928 ^I

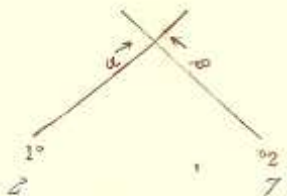
多角点計算用紙

測量No. _____



測点	視点	内角	修正角	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	Cos	N (+)	S (-)	E (+)	W (-)	X	Y	
	928 ¹	"	"	"	.	.	.	.	.	.	.	6538960	3522537	928 ¹
928 ¹	7			66 26 32	65.720	400207	916425	18.297	41.899	.	.	6557265	3566436	7
"	1			336 57 22	17.280	391436	920205	16.094	.	.	6.866	6.555062	3.515691	1
1	2			"	19.810	"	"	18.229	.	.	7.756	6.573291	3.507937	2
	3			.	.	.	.	.	.	.	.	.	.	.
3	4			66 26 32	17.082	400207	916425	8.836	15.654	.	.	6619037	3556220	4
4	10			156 57 22	29.089	391436	920205	26.768	11.386	.	.	6592269	3568108	10
10	13			66 26 32	12.046	400207	916425	4.821	11.039	.	.	6597090	3578747	13
13	14			336 57 22	29.089	391436	920205	26.768	.	.	11.386	6623858	3567761	14
	7			.	.	.	.	.	.	.	.	.	.	.
7	6			66 26 32	20.610	400207	916425	8.168	18.706	.	.	6565433	3583160	6
6	5			"	20.200	"	"	8.086	18.512	.	.	6573517	3601652	5

算出点 13



$$\begin{aligned} 7 X_2 &= -65977.6765 \\ 2 X_1 &= -65977.6791 \\ \Delta X &= -11161.6216 \end{aligned}$$

$$\alpha = 106 - 28 - 38''$$

$$\beta = 336 - 57 - 28''$$

$$\beta - \alpha = 230 - 32 - 15''$$

$$\begin{aligned} \Delta Y \times \textcircled{2} &= +1151.99066 \\ \Delta X \times \textcircled{1} &= +1161.67315 \\ E &= 165.77751 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{1}} = 165.17196$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1118.6197 \\ X_1 &= -65977.6791 \\ X &= -65977.6791 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1161.6799 \\ Y_1 &= -35507.1937 \\ Y &= -35507.1937 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35507.1936 \\ Y_1 &= -35507.1937 \\ \Delta Y &= -1151.6199 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= +.460102017 \textcircled{1} \\ \sin \alpha &= +.19166625 \textcircled{2} \\ \cos \beta &= +.19202015 \textcircled{3} \\ \sin \beta &= +.13916316 \textcircled{4} \\ \sin(\beta - \alpha) &= -.19199956 \textcircled{5} \end{aligned}$$

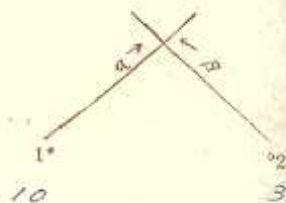
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +122.61130 \\ \Delta X \times \textcircled{2} &= +116.68663 \\ F &= 137.69793 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{1}} = 137.69796$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +1136.1323 \\ X_2 &= -65977.6765 \\ X &= -65977.6765 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +1161.6100 \\ Y_2 &= -35507.1936 \\ Y &= -35507.1936 \end{aligned}$$

算出点 9



$$\begin{aligned} 3 X_2 &= -6612.6204 \\ 10 X_1 &= -66921.8619 \\ \Delta X &= -1129.9318 \end{aligned}$$

$$\alpha = 268 - 28 - 38''$$

$$\beta = 158 - 57 - 28''$$

$$\beta - \alpha = 190 - 32 - 50''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +124.88296 \\ \Delta X \times \textcircled{1} &= +117.80870 \\ E &= 17.08026 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{1}} = 17.0810$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1161.8318 \\ X_1 &= -66921.8619 \\ X &= -66921.8619 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{3} &= +1125.653 \\ Y_1 &= -35507.1938 \\ Y &= -35507.1938 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35507.1936 \\ Y_1 &= -35507.1938 \\ \Delta Y &= -1127.040 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= -.460102017 \textcircled{1} \\ \sin \alpha &= -.19166625 \textcircled{2} \\ \cos \beta &= -.19202015 \textcircled{3} \\ \sin \beta &= +.13916316 \textcircled{4} \\ \sin(\beta - \alpha) &= -.19199956 \textcircled{5} \end{aligned}$$

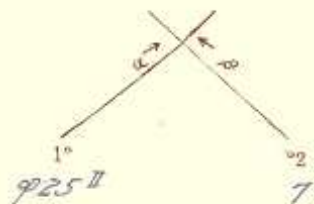
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +110.88160 \\ \Delta X \times \textcircled{2} &= +117.80870 \\ F &= 129.08788 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{1}} = 129.08891$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +1126.7618 \\ X_2 &= -6612.6204 \\ X &= -6612.6204 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= +1161.8318 \\ Y_2 &= -35507.1938 \\ Y &= -35507.1938 \end{aligned}$$

算出点 3



$$\begin{aligned} 7 X_2 &= -6557 \cdot 265 \\ 9257 X_1 &= -65199 \cdot 1903 \\ \hline \Delta X &= -11361 \cdot 638 \end{aligned}$$

$$\begin{aligned} \alpha &= 66^\circ - 26' - 13'' \\ \beta &= 236^\circ - 57' - 22'' \\ \beta - \alpha &= 170^\circ - 31' - 50'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +169 \cdot 195994 \\ \Delta X \times \textcircled{4} &= +114 \cdot 134143 \\ \hline E &= 145 \cdot 71851 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 145 \cdot 7206$$

$$\begin{aligned} S_1 \times \textcircled{1} &= -1119 \cdot 1298 \\ X_1 &= -65199 \cdot 1903 \\ \hline X &= -6612 \cdot 201 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= -1411 \cdot 900 \\ Y_1 &= -3499 \cdot 168 \\ \hline Y &= -3541 \cdot 068 \end{aligned}$$

$$\begin{aligned} 7 Y_2 &= -3564 \cdot 436 \\ 7 Y_1 &= -34919 \cdot 168 \\ \hline \Delta Y &= +1635 \cdot 268 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 7 \cdot 661021017 \textcircled{1} \\ \text{Sin} \alpha &= 7 \cdot 19164625 \textcircled{2} \\ \text{Cos} \beta &= 7 \cdot 192012015 \textcircled{3} \\ \text{Sin} \beta &= 0 \cdot 139116316 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - \cdot 19199956 \textcircled{5} \end{aligned}$$

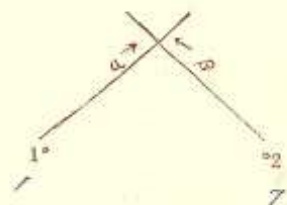
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +126 \cdot 12071 \\ \Delta X \times \textcircled{2} &= 9 \cdot 132 \cdot 57598 \\ \hline F &= 159 \cdot 169667 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = 159 \cdot 16994$$

$$\begin{aligned} S_2 \times \textcircled{3} &= -154 \cdot 936 \\ X_2 &= -6557 \cdot 265 \\ \hline X &= -6612 \cdot 201 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= -123 \cdot 368 \\ Y_2 &= -3564 \cdot 436 \\ \hline Y &= -3541 \cdot 068 \end{aligned}$$

算出点 8



$$\begin{aligned} 7 X_2 &= -6557 \cdot 265 \\ 1 X_1 &= -65551 \cdot 168 \\ \hline \Delta X &= -11121 \cdot 203 \end{aligned}$$

$$\begin{aligned} \alpha &= 66^\circ - 26' - 32'' \\ \beta &= 236^\circ - 57' - 22'' \\ \beta - \alpha &= 170^\circ - 13' - 15'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= 7 \cdot 169 \cdot 195994 \\ \Delta X \times \textcircled{4} &= 0 \cdot 1111 \cdot 134143 \\ \hline E &= 169 \cdot 171722 \end{aligned}$$

$$S_1 = \frac{|E|}{\textcircled{5}} = 169 \cdot 17198$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1119 \cdot 1298 \\ X_1 &= -65199 \cdot 1903 \\ \hline X &= -6612 \cdot 201 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1411 \cdot 900 \\ Y_1 &= -3499 \cdot 168 \\ \hline Y &= -3541 \cdot 068 \end{aligned}$$

$$\begin{aligned} 7 Y_2 &= -3564 \cdot 436 \\ 7 Y_1 &= -34919 \cdot 168 \\ \hline \Delta Y &= +1635 \cdot 268 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= 7 \cdot 661021017 \textcircled{1} \\ \text{Sin} \alpha &= 7 \cdot 19164625 \textcircled{2} \\ \text{Cos} \beta &= 7 \cdot 192012015 \textcircled{3} \\ \text{Sin} \beta &= 0 \cdot 139116316 \textcircled{4} \\ \text{Sin}(\beta - \alpha) &= - \cdot 19199956 \textcircled{5} \end{aligned}$$

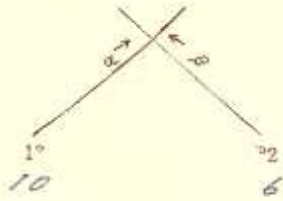
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +119 \cdot 50819 \\ \Delta X \times \textcircled{2} &= +1121 \cdot 01888 \\ \hline F &= 1171 \cdot 42921 \end{aligned}$$

$$S_2 = \frac{|F|}{\textcircled{6}} = 1171 \cdot 42903$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +1119 \cdot 1298 \\ X_2 &= -6557 \cdot 265 \\ \hline X &= -6612 \cdot 201 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= 0 \cdot 1161 \cdot 1846 \\ Y_2 &= -3564 \cdot 436 \\ \hline Y &= -3541 \cdot 068 \end{aligned}$$

算出点 11



$$\begin{aligned} 6 \quad X_2 &= -65651.1633 \\ 10 \quad X_1 &= -65692.1218 \\ \Delta X &= 41.2710838 \end{aligned}$$

$$\begin{aligned} \alpha &= 66^\circ - 26' - 13'' \\ \beta &= 83^\circ - 54' - 28'' \\ \beta - \alpha &= 27^\circ - 38' - 50'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1171.83252 \\ \Delta X \times \text{④} &= +1171.50458 \\ E &= 1171.52796 \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 1171.12181$$

$$\begin{aligned} S_1 \times \text{①} &= +1171.12181 \\ X_1 &= -65692.1218 (+) \\ X &= -65651.1633 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= +1171.12181 \\ Y_1 &= -35681.1618 (+) \\ Y &= -35640.1199 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35693.1610 \\ Y_1 &= -35681.1618 \\ \Delta Y &= +11.9992 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +.46062017 \text{ ①} \\ \text{Sin} \alpha &= +.19164225 \text{ ②} \\ \text{Cos} \beta &= +.19202015 \text{ ③} \\ \text{sin} \beta &= +.13914361 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.1999956 \text{ ⑤} \end{aligned}$$

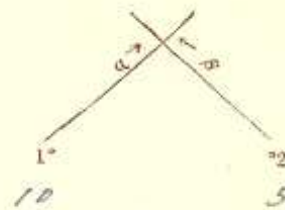
$$\begin{aligned} \Delta Y \times \text{①} &= +116.01591 \\ \Delta X \times \text{②} &= 0.124.59318 \\ F &= 1160.16105 \end{aligned}$$

$$S_2 = \left| \frac{F}{\text{⑥}} \right| = 1301.61105$$

$$\begin{aligned} S_2 \times \text{③} &= +1171.12181 \\ X_2 &= -65651.1633 (+) \\ X &= -65692.1218 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0.1171.12181 \\ Y_2 &= -35693.1610 (+) \\ Y &= -35681.1618 \end{aligned}$$

算出点 12



$$\begin{aligned} 5 \quad X_2 &= -65693.1610 \\ 10 \quad X_1 &= -65692.1218 \\ \Delta X &= -1.2710838 \end{aligned}$$

$$\begin{aligned} \alpha &= 66^\circ - 26' - 13'' \\ \beta &= 83^\circ - 54' - 28'' \\ \beta - \alpha &= 27^\circ - 38' - 50'' \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= +1171.83252 \\ \Delta X \times \text{④} &= +1171.50458 \\ E &= 1171.52796 \end{aligned}$$

$$S_1 = \left| \frac{E}{\text{⑤}} \right| = 1171.12181$$

$$\begin{aligned} S_1 \times \text{①} &= +1171.12181 \\ X_1 &= -65692.1218 (+) \\ X &= -65693.1610 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= +1171.12181 \\ Y_1 &= -35681.1618 (+) \\ Y &= -35693.1610 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35681.1618 \\ Y_1 &= -35693.1610 \\ \Delta Y &= +11.9992 \end{aligned}$$

$$\begin{aligned} \text{Cos} \alpha &= +.46062017 \text{ ①} \\ \text{Sin} \alpha &= +.19164225 \text{ ②} \\ \text{Cos} \beta &= +.19202015 \text{ ③} \\ \text{sin} \beta &= +.13914361 \text{ ④} \\ \text{Sin}(\beta - \alpha) &= -.1999956 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +116.01591 \\ \Delta X \times \text{②} &= 0.124.59318 \\ F &= 1160.16105 \end{aligned}$$

$$S_2 = \left| \frac{F}{\text{⑥}} \right| = 1301.61105$$

$$\begin{aligned} S_2 \times \text{③} &= +1171.12181 \\ X_2 &= -65651.1633 (+) \\ X &= -65692.1218 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= 0.1171.12181 \\ Y_2 &= -35693.1610 (+) \\ Y &= -35681.1618 \end{aligned}$$

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
10											
筆番号	1	6502.266	-	142.006	3604.893	-	119.979	444.812		1885.775	
23	2	6488.209	-	913.896	3572.708	-	44.391	364.406		176.590	
	12	6516.160	-	942.006	3560.502	-	19.979		782.461		21.087
	9	6530.215	-	113.896	3592.687	-	944.391		2229.094	454.219	

控除シタル値

X = 於テ 6480

y = 於テ 3560

Σ = 809 218 2951 535 2339 994 197 677

ΣS = 2142.317

ΣS = 2142.317

S = 1071.159

印
日

324.0384

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
10											
筆番号	8	6540.172	-	41.212	3615.488	-	19.168	770.017		4759.491	
23	10	6526.541	-	913.950	3584.274	-	43.259	1148.137		1175.623	
	6	6554.122	-	41.212	3572.229	-	19.168		1037.410		2976.702
	7	6567.753	-	13.950	3603.442	-	43.259		2930.927	1443.016	

控除シタル値

X = 於テ 6500

y = 於テ 3500

Σ = 1918 154 3968 337 6202 507 4152 325

ΣS = 2050.183

ΣS = 2050.183

S = 1025.091

印
日

310.0984

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
18											
筆番号	10	6526.561	-	+ 37.962	3584.274	-	+ 11.727	311.246	,	3199.210	,
③,	12	6516.160	-	+ 3.535	3560.502	-	+ 26.761	432.458	,	213.875	,
	11	6523.006	-	+ 3.535	3557.513	-	+ 26.759	615.618	,	203.300	,
	5	6512.625	-	⊖ 7.202	3533.743	-	+ 31.251	394.544	,	,	243.017
	928 [#]	6530.208	-	⊖ 22.229	3526.262	-	+ 5.633	170.162	,	,	583.778
	928 [#]	6534.854	-	⊖ 23.914	3528.110	-	⊖ 45.967		1602.124	,	672.223
	6	6554.122	-	+ 8.313	3572.229	-	⊖ 56.164		3039.708	600.440	,

控除シタル値

X = 於テ 6500

Y = 於テ 3500

$$\Sigma = 1924 \quad 058 \quad 4641 \quad 842 \quad 4216 \quad 033 \quad 1499 \quad 018$$

$$2S = 2717.814 \quad 2717.815$$

$$S = 1358.907$$

477.0754

印
日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
18											
筆番号	13	6505.080	-	+ 28.381	3565.341	-	+ 16.113	242.984	,	1023.013	,
③,	4	6494.625	-	⊖ 7.545	3541.600	-	+ 31.598	146.145	,	,	86.013
	5	6512.625	-	⊖ 28.381	3533.743	-	⊖ 16.113		264.857	,	106.230
	11	6523.006	-	+ 7.545	3557.513	-	⊖ 31.598		1042.924	207.586	,

控除シタル値

X = 於テ 6490

Y = 於テ 3530

$$\Sigma = 389 \quad 125 \quad 1407 \quad 481 \quad 1210 \quad 599 \quad 192 \quad 243$$

$$2S = 1018.356 \quad 1018.356$$

$$S = 509.178$$

154.0374

印
日

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
18											
筆番号	2	6488.209	-	+ 26.453	3,572.708	-	+ 16.163	540.390	,	1777.929	,
	933 ⁵	6479.106	-	+ 7.256	3,551.862	-	+ 25.493	741.999	,	376.911	,
	933 ²	6480.953	-	0 13.992	3,547.215	-	+ 9.813	303.742	,		660.1632
	3	6493.098	-	0 22.606	3,542.049	-	0 18.790		809.811	,	9.50.1560
	14	6503.559	-	+ 6.889	3,566.005	-	930.659		16.62.065	322.698	,

控除シクル値

Xニ於テ 6450

yニ於テ 3500

$$\Sigma = \frac{1586.131}{28} = \frac{2451.876}{865.745} = \frac{2476.938}{865.746}$$

$$S = \frac{232.873}{13.096}$$

13.096

年 月 日

印

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
18											
筆番号	14	6503.559	-	+ 11.982	3,566.005	-	+ 23.292	315.816	,	311.592	,
	10	6493.098	-	+ 8.934	3,542.049	-	+ 24.605	76.226	,	10.306	,
	4	6494.625	-	0 11.982	3,541.400	-	0 23.292		107.726	,	16.775
	12	6505.080	-	0 8.934	3,565.341	-	0 24.605		371.043	,	226.396

控除シクル値

Xニ於テ 6490

yニ於テ 3540

$$\Sigma = \frac{392.042}{86.727} = \frac{478.769}{86.727} = \frac{381.890}{86.727}$$

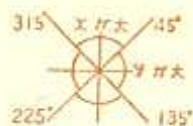
$$S = \frac{43.264}{13.0954}$$

13.0954

協和建設測量

多角点計算用紙

測量No.

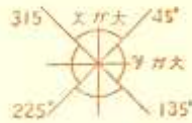


象 限	I	+	+	+
	II	-	-	+
	III	+	-	-
	IV	+	-	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点	
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y		
	6											6.556	122.572	229	6
6	B			246.2432	12.970	4.0227	9.16425		5.191		11.886	6.548	931.356	343	B
B	A								5.191		11.886	6.543	720.354	457	A
	10											6.526	521.352	276	10
10	C			246.2432	12.970	"	"		5.191		11.886	6.521	350.357	388	C
															11
					11.313				10.367		2.527	6.533	373.352	986	D

角点計算用紙

測量No.

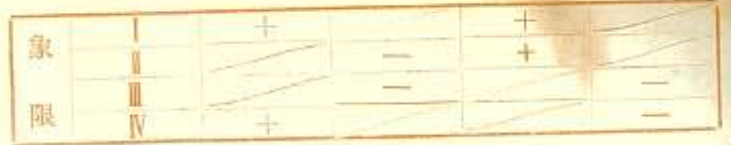
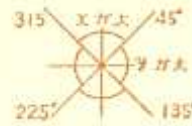


象 限	I	+	+	+
	II	-	+	-
III	-	-	-	-
IV	+	-	-	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
												6520.456	3646.550	934 ¹
	934 ¹											6519.159	3643.580	934 ²
934 ¹	934 ²			246 24 32	3.247							6502.264	3604.893	1
934 ²	1				42.215							6488.209	3572.708	2
1	2	102.682			35.120							6479.106	3551.862	933 ¹
2	933 ¹				22.747							6471.686	3548.606	933 ²
933 ¹	933 ²				3.553							6480.959	3567.215	933 ³
933 ²	933 ³			336 57 22	3.553							6493.098	3562.049	3
933 ³	3				13.197							6494.625	3561.400	4
3	4	52.526			1.660							6512.625	3533.743	5
4	5				19.561							6520.202	3526.262	928 ¹
5	928 ¹				19.108							6523.446	3524.885	928 ²
928 ¹	928 ²				3.519							6534.854	3528.110	928 ³
928 ²	928 ³			66 24 32	3.519							6556.124	3572.129	6
928 ³	6				48.143							6567.753	3603.442	7
6	7	110.600			34.060							6579.118	3629.466	927 ¹
7	927 ¹				28.377							6580.690	3633.067	927 ²
927 ¹	927 ²				3.929							6576.856	3633.925	927 ³
927 ²	927 ³			167 22 00	3.929							6523.619	3645.862	934 ⁴
927 ³	934 ⁴				54.555							6520.456	3646.550	934 ⁵
934 ⁴	934 ⁵				3.261									

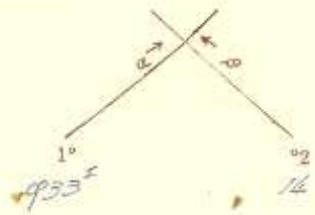
多角点計算用紙

測量No. _____



測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	933 ^I											6477.684	3548.606	933 ^I
933 ^I	2			66 24 32	26.300	400207	916425	10.535		26.102		6488.209	3572.708	2
2	11			336 24 32	37.970	"	"	34.797			15.196	6523.006	3557.513	11
"	12				30.500	"	"	27.951			12.206	6516.160	3560.502	12
12	10			66 24 32	25.940	"	"	10.381		23.772		6526.541	3586.274	10
	2											6488.209	3572.708	2
2	14			336 24 32	16.750	400207	916425	15.350			6.703	6503.559	3566.005	14
14	13				1.660	"	"	1.521				664.6505.080	3565.361	13
2	1			66 24 32	35.120	"	"	14.055		32.185		6502.266	3606.893	1
1	9			336 24 32	30.500	"	"	27.951			12.206	6530.215	3592.687	9
9	8			66 24 32	24.880	"	"	9.957		22.801		6540.172	3615.488	8
	6											6556.122	3572.229	6
6	7			66 24 32	32.060	400207	916425	13.631		31.213		6567.753	3603.642	7

算出点 3



$$\begin{aligned} X_2 &= -651031.1559 \\ 93.3^\circ X_1 &= -64771.684 \\ \hline \Delta X &= -11251.0125 \end{aligned}$$

$$\begin{aligned} Y_2 &= -351611.10105 \\ Y_1 &= -35461.10106 \\ \hline \Delta Y &= +1171.01919 \end{aligned}$$

$$\alpha = 123.6^\circ - 57' - 12''$$

$$\begin{aligned} \cos \alpha &= +.191210612151 \text{ ①} \\ \sin \alpha &= \ominus.191210612151 \text{ ②} \\ \cos \beta &= \ominus.121010612151 \text{ ③} \\ \sin \beta &= \ominus.191210612151 \text{ ④} \\ \sin(\beta - \alpha) &= \ominus.191210612151 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 91181.966210 \\ \Delta X \times \text{④} &= 91231.712150 \\ \hline E &= 1161.749160 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +1176.1010615 \\ \Delta X \times \text{②} &= 2114.121061 \\ \hline F &= 1261.749160 \end{aligned}$$

$$S_1 = \frac{E}{\text{③}} = 1161.749160$$

$$S_2 = \frac{F}{\text{④}} = 1261.749160$$

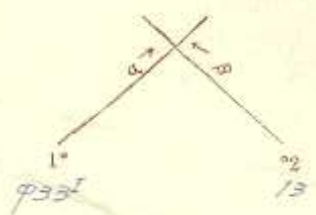
$$\begin{aligned} S_1 \times \text{①} &= -1115.1414 \\ X_1 &= -64771.684 \\ \hline X &= -64993.10198 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= -11101.1414 \\ X_2 &= -651031.1559 \\ \hline X &= -64993.10198 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= -11161.1557 \\ Y_1 &= -35461.10106 \\ \hline Y &= -35461.10106 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= -11231.9141 \\ Y_2 &= -35161.10105 \\ \hline Y &= -35461.10106 \end{aligned}$$

算出点 4



$$\begin{aligned} X_2 &= -651031.101810 \\ 93.3^\circ X_1 &= -64771.684 \\ \hline \Delta X &= -11271.13916 \end{aligned}$$

$$\begin{aligned} Y_2 &= -351611.13417 \\ Y_1 &= -35461.10106 \\ \hline \Delta Y &= +1176.17315 \end{aligned}$$

$$\alpha = 111^\circ - 1' - 11''$$

$$\begin{aligned} \cos \alpha &= \ominus.191210612151 \text{ ①} \\ \sin \alpha &= \ominus.191210612151 \text{ ②} \\ \cos \beta &= \ominus.121010612151 \text{ ③} \\ \sin \beta &= \ominus.191210612151 \text{ ④} \\ \sin(\beta - \alpha) &= \ominus.191210612151 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 91116.69746 \\ \Delta X \times \text{④} &= 91231.712150 \\ \hline E &= 1179.40896 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= +1176.17315 \\ \Delta X \times \text{②} &= 91116.69746 \\ \hline F &= 1261.17315 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 1179.40896$$

$$S_2 = \frac{F}{\text{④}} = 1261.17315$$

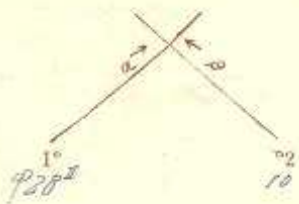
$$\begin{aligned} S_1 \times \text{①} &= -11161.1941 \\ X_1 &= -64771.684 \\ \hline X &= -64993.10198 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= -11101.1414 \\ X_2 &= -651031.101810 \\ \hline X &= -64993.10198 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= -11171.12106 \\ Y_1 &= -35461.10106 \\ \hline Y &= -35461.10106 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= -11231.9141 \\ Y_2 &= -35161.13417 \\ \hline Y &= -35461.10106 \end{aligned}$$

算出点 6



$$\begin{aligned} 10 \quad X_2 &= -652181.1541 \\ 928^\circ \quad X_1 &= -652131.4446 \\ \Delta X &= -50.7095 \end{aligned}$$

$$\begin{aligned} Y_2 &= -3584.1274 \\ Y_1 &= -3524.8185 \\ \Delta Y &= +59.3089 \end{aligned}$$

$$\alpha = 168^\circ - 24^\circ - 13^\circ$$

$$\text{Cos} \alpha = + \cdot 1410102107 \text{ ①}$$

$$\text{Sin} \alpha = + \cdot 191614215 \text{ ②}$$

$$\beta = 136^\circ - 36^\circ - 32^\circ$$

$$\text{Cos} \beta = + \cdot 191642151 \text{ ③}$$

$$\text{sin} \beta = \ominus \cdot 14101021071 \text{ ④}$$

$$\beta - \alpha = 127^\circ - 60' - 64''$$

$$\text{Sin}(\beta - \alpha) = - \cdot 1111111111 \text{ ⑤}$$

$$\Delta Y \times \text{③} = + 196.22556$$

$$\Delta Y \times \text{①} = + 123.76789$$

$$\Delta X \times \text{④} = + 112.76343$$

$$\Delta X \times \text{②} = \ominus 116.32791$$

$$E = 151.66213$$

$$F = 1310.109580$$

$$S_1 = \frac{|E|}{\text{⑤}} = 151.6621$$

$$S_2 = \frac{|F|}{\text{⑤}} = 1310.10958$$

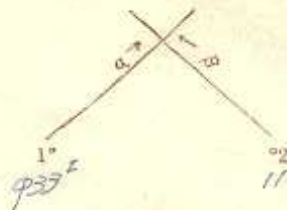
$$\begin{aligned} S_1 \times \text{①} &= + 1210.10176 \\ X_1 &= -652131.4446 (+) \\ X &= -65212.122 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= + 1271.581 \\ X_2 &= -65261.1541 (+) \\ X &= -6524.122 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= + 1471.344 \\ Y_1 &= -352161.8185 (+) \\ Y &= -3572.229 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= \ominus 1121.0145 \\ Y_2 &= -3584.274 (+) \\ Y &= -3572.229 \end{aligned}$$

算出点 5



$$\begin{aligned} 11 \quad X_2 &= -652131.1016 \\ 933^\circ \quad X_1 &= -64771.6184 \\ \Delta X &= -145.4832 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35171.15113 \\ Y_1 &= -35148.16106 \\ \Delta Y &= +23.98547 \end{aligned}$$

$$\alpha = 336^\circ - 57' - 32''$$

$$\text{Cos} \alpha = + \cdot 192012015 \text{ ①'}$$

$$\text{Sin} \alpha = \ominus \cdot 13914316 \text{ ②'}$$

$$\beta = 246^\circ - 26' - 32''$$

$$\text{Cos} \beta = \ominus \cdot 1410102107 \text{ ③'}$$

$$\text{sin} \beta = \ominus \cdot 191614215 \text{ ④'}$$

$$\beta - \alpha = 109^\circ - 27' - 10''$$

$$\text{Sin}(\beta - \alpha) = - \cdot 19199154 \text{ ⑤'}$$

$$\Delta Y \times \text{③'} = \ominus 119.154464$$

$$\Delta Y \times \text{①'} = + 119.19627$$

$$\Delta X \times \text{④'} = \ominus 141.159429$$

$$\Delta X \times \text{②'} = \ominus 177.174066$$

$$E = 137.194957$$

$$F = 125.193493$$

$$S_1 = \frac{|E|}{\text{⑤'}} = 137.197113$$

$$S_2 = \frac{|F|}{\text{⑤'}} = 125.193481$$

$$\begin{aligned} S_1 \times \text{①'} &= + 1331.1944 \\ X_1 &= -64771.6184 (+) \\ X &= -65121.8125 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③'} &= \ominus 1110.1351 \\ X_2 &= -65213.1016 (+) \\ X &= -6512.1625 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②'} &= \ominus 1174.18613 \\ Y_1 &= -35148.16106 (+) \\ Y &= -35129.1743 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④'} &= \ominus 1121.17110 \\ Y_2 &= -35171.15113 (+) \\ Y &= -35129.1743 \end{aligned}$$

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₇	5	6636.985	-	+ 17.438	3585.754	-	+ 7.571	113.451	,	429.098	,
	436 ^I	6629.415	-	+ 3.723	3573.000	-	+ 17.401	163.830	,	48.399	,
	436 ^{II}	6631.262	-	0 10.496	3568.353	-	+ 8.326	93.767	,	,	87.673
	1	6639.911	-	0 15.591	3566.674	-	0 12.218	,	203.273	,	72.872
	6	6646.853	-	+ 4.926	3580.571	-	0 21.080	,	566.061	101.333	,

控除シタル値

X = 於テ 1.420 -

y = 於テ 3.560 -

$$\bar{x} = \frac{371}{25} = 14.84$$

$$2S = 438.286$$

$$438.285$$

$$S = 219.143$$

年 月 日

66.29坪

面積計算用紙

街廓番号	NO	X _n	X _n -X _{n+1}	ΔX+ΔX _{n+1}	Y _n	Y _n -Y _{n+1}	Δy _n +Δy _{n+1}	(1)×(6)		(3)×(4)	
		(1)	(2)	(3)	(4)	(5)	(6)	+	-	+	-
筆番号 ② ₅	6	6646.853	-	+ 39.060	3580.571	-	+ 1.871	31.532	,	1194.103	,
	1	6639.911	-	+ 22.071	3566.674	-	+ 28.240	279.887	,	,	323.870
	433 ^I	6668.926	-	0 33.159	3552.331	-	+ 10.495	408.507	,	,	78.459
	433 ^{II}	6673.570	-	0 10.041	3554.179	-	0 14.214	,	619.304	,	41.986
	6	6678.971	-	+ 26.717	3566.545	-	0 26.392	,	1292.443	112.033	,

控除シタル値

X = 於テ 6.430 -

y = 於テ 3.550 -

$$\bar{x} = \frac{719}{25} = 28.76$$

$$2S = 1191.821$$

$$1191.821$$

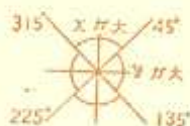
$$S = 595.911$$

年 月 日

180.26坪

多角点計算用紙

測量No.



象 限	I	+	+	+
	II	-	+	-
	III	-	-	-
	IV	+	-	+

測点	観点	内角	修正角量	方位角	辺長	真数		辺の X		辺の Y		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	933 ^{II}													
933 ^{II}	933 ^{II'}			66 26 32	3.519							6472.162	3550.954	933 ^{II}
933 ^{II'}	2				13.696							6473.570	3554.179	933 ^{II'}
2	3	18322			29.550							6478.971	3566.565	2
3	934 ^{III'}				55.278							6490.797	3593.625	3
934 ^{III}	934 ^{III}				3.929							6512.920	3644.283	934 ^{III}
934 ^{III'}	934 ^{III'}				3.929							6514.492	3647.884	934 ^{III'}
934 ^{III''}	934 ^{III''}			167 23 00	3.929							6510.658	3648.742	934 ^{III''}
934 ^{III'''}	935 ^{IV'}				61.722							6469.944	3657.856	935 ^{IV'}
935 ^{IV}	935 ^{IV}				3.261							6466.781	3658.564	935 ^{IV}
935 ^{IV'}	935 ^{IV'}			246 26 32	3.261							6465.484	3655.594	935 ^{IV'}
935 ^{IV''}	6				46.659							6446.811	3612.834	6
6	7	90126			14.550							6440.988	3599.500	7
7	5				15.600							6434.985	3585.754	5
5	936 ^{I'}				13.917							6429.415	3573.000	936 ^{I'}
936 ^I	936 ^I				3.553							6427.993	3569.744	936 ^I
936 ^{I'}	936 ^{I'}				3.553							6431.262	3568.353	936 ^{I'}
936 ^{I''}	1	60928			9.398							6439.911	3566.674	1
1	933 ^{II'}				31.530							6448.926	3552.331	933 ^{II'}
933 ^{II}	933 ^{II}				3.519							6472.162	3550.954	933 ^{II}

多角点計算用紙

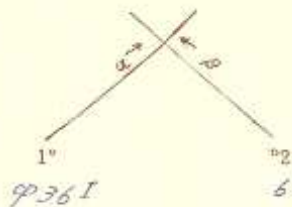
測量No.



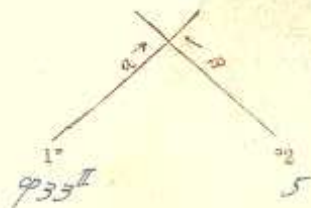
象	I	+	+	+
限	II	-	-	-
	III	+	+	+
	IV	-	-	-

測点	観点	内角	修正角量	方位角	辺長	真数		辺のX		辺のY		点の座標		点
						Sin	CoS	N (+)	S (-)	E (+)	W (-)	X	Y	
	436 ^I											6427.993	3569.766	436 ^I
436 ^I	5			66 26 32	17.670	400207	916425	6.992	16.010			6434.985	3585.756	5
5	6			"	29.550	"	"	11.826	27.080			6446.811	3612.836	6
	6			336 26 32	12.950	"	"	11.868		5.183		6446.853	3580.571	6
	4			"								6446.811	3612.836	4
4	7			246 26 32	14.550	400207	916425	5.823	13.334			6440.988	3592.500	7
7	8			336 26 32	24.084	"	"	22.071		9.639		6463.059	3589.861	8
8	9			66 26 32	14.550	"	"	5.823	13.334			6463.882	3603.195	9

算出点 1



算出点 2



$$\begin{aligned} 6 X_2 &= -64461.1853 \\ 93.6^\circ X_1 &= -64271.1813 \\ \Delta X &= -1118.0040 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35801.5771 \\ Y_1 &= -35619.1766 \\ \Delta Y &= -182.4005 \end{aligned}$$

$$\begin{aligned} 5 X_2 &= -64314.1885 \\ 93.3^\circ X_1 &= -64271.1813 \\ \Delta X &= -43.0072 \end{aligned}$$

$$\begin{aligned} Y_2 &= -35855.1756 \\ Y_1 &= -35550.1956 \\ \Delta Y &= -305.0000 \end{aligned}$$

$$\begin{aligned} \alpha &= 93.6 - 57 - 27 \\ \beta &= 266 - 27 - 32 \\ \beta - \alpha &= 189 - 27 - 40 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= + \cdot 19202015 \text{ ①} \\ \sin \alpha &= - \cdot 391436 \text{ ②} \\ \cos \beta &= + \cdot 160162017 \text{ ③} \\ \sin \beta &= - \cdot 1916162017 \text{ ④} \\ \sin(\beta - \alpha) &= - \cdot 19991956 \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \alpha &= 188 - 27 - 32 \\ \beta &= 238 - 27 - 32 \\ \beta - \alpha &= 278 - 60 - 00 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= + \cdot 160062017 \text{ ①} \\ \sin \alpha &= + \cdot 1916162017 \text{ ②} \\ \cos \beta &= + \cdot 1916162017 \text{ ③} \\ \sin \beta &= - \cdot 160062017 \text{ ④} \\ \sin(\beta - \alpha) &= - \cdot 1.0 + + + + + \text{ ⑤} \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= 0.1117 \cdot 19202015 \\ \Delta X \times \text{④} &= 0.1117 \cdot 1916162017 \\ E &= 117.195076 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= 7.1119 \cdot 19202015 \\ \Delta X \times \text{②} &= 6.1117 \cdot 391436 \\ F &= 117.195076 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{③} &= + 1.571 \cdot 19202015 \\ \Delta X \times \text{④} &= + 1.174 \cdot 1916162017 \\ E &= 117.10113109 \end{aligned}$$

$$\begin{aligned} \Delta Y \times \text{①} &= + 1.113 \cdot 19202015 \\ \Delta X \times \text{②} &= + 1.341 \cdot 1916162017 \\ F &= 1417.097113 \end{aligned}$$

$$S_1 = \frac{E}{\text{⑤}} = 117.195076$$

$$S_2 = \frac{F}{\text{⑤}} = 117.195076$$

$$S_1 = \frac{E}{\text{⑤}} = 117.10113109$$

$$S_2 = \frac{F}{\text{⑤}} = 1417.097113$$

$$\begin{aligned} S_1 \times \text{①} &= + 117.1 \cdot 19202015 \\ X_1 &= -64271.1813 \\ X &= -64461.1853 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= + 117.1 \cdot 160162017 \\ X_2 &= -64461.1853 \\ X &= -64461.1853 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{①} &= + 117.1 \cdot 19202015 \\ X_1 &= -64271.1813 \\ X &= -64271.1813 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{③} &= + 1417.1 \cdot 19202015 \\ X_2 &= -64314.1885 \\ X &= -64271.1813 \end{aligned}$$

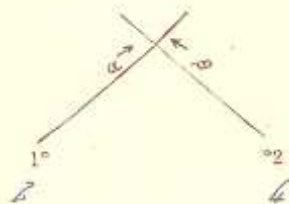
$$\begin{aligned} S_1 \times \text{②} &= - 117.1 \cdot 391436 \\ Y_1 &= -35619.1766 \\ Y &= -35619.1766 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - 117.1 \cdot 1916162017 \\ Y_2 &= -35801.5771 \\ Y &= -35619.1766 \end{aligned}$$

$$\begin{aligned} S_1 \times \text{②} &= - 117.1 \cdot 391436 \\ Y_1 &= -35619.1766 \\ Y &= -35619.1766 \end{aligned}$$

$$\begin{aligned} S_2 \times \text{④} &= - 1417.1 \cdot 1916162017 \\ Y_2 &= -35550.1956 \\ Y &= -35619.1766 \end{aligned}$$

算出点 3



$$\begin{aligned} X_2 &= -646661.1811 \\ X_1 &= -646781.1917 \\ \Delta X &= -119120.1106 \end{aligned}$$

$$\alpha = 168^\circ - 28' - 32''$$

$$\beta = 336^\circ - 28' - 32''$$

$$\beta - \alpha = 270^\circ - 00' - 00''$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= +142.62060 \\ \Delta X \times \textcircled{3} &= +1178.87066 \\ E &= 129.54897 \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{3}} = 129.54897$$

$$\begin{aligned} S_1 \times \textcircled{1} &= +1171.1826 \\ X_1 &= -646781.1917 \\ X &= -646901.1797 \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= +1217.10590 \\ Y_1 &= -356661.15615 \\ Y &= -356931.1625 \end{aligned}$$

$$\begin{aligned} Y_2 &= -356121.1836 \\ Y_1 &= -356661.15615 \\ \Delta Y &= +54039.9725 \end{aligned}$$

$$\begin{aligned} \cos \alpha &= +.160102017 \textcircled{1} \\ \sin \alpha &= +.191164225 \textcircled{2} \\ \cos \beta &= +.191164225 \textcircled{3} \\ \sin \beta &= +.160102017 \textcircled{4} \\ \sin(\beta - \alpha) &= -1.00000 \textcircled{5} \end{aligned}$$

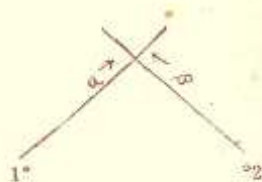
$$\begin{aligned} \Delta Y \times \textcircled{1} &= +178.52518 \\ \Delta X \times \textcircled{2} &= +129.67223 \\ F &= 127.19976 \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = 127.19976$$

$$\begin{aligned} S_2 \times \textcircled{3} &= +1271.1886 \\ X_2 &= -646661.1811 \\ X &= -646901.1797 \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= -1119.12019 \\ Y_2 &= -356121.1836 \\ Y &= -356931.1625 \end{aligned}$$

算出点



$$\begin{aligned} X_2 &= - \\ X_1 &= - \\ \Delta X &= - \end{aligned}$$

$$\alpha = \text{ }$$

$$\beta = \text{ }$$

$$\beta - \alpha = \text{ }$$

$$\begin{aligned} \Delta Y \times \textcircled{3} &= - \\ \Delta X \times \textcircled{4} &= - \\ E &= \end{aligned}$$

$$S_1 = \frac{E}{\textcircled{3}} = \text{ }$$

$$\begin{aligned} S_1 \times \textcircled{1} &= - \\ X_1 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_1 \times \textcircled{2} &= - \\ Y_1 &= - \\ Y &= - \end{aligned}$$

$$\begin{aligned} Y_2 &= - \\ Y_1 &= - \\ \Delta Y &= - \end{aligned}$$

$$\cos \alpha = - \text{ }$$

$$\sin \alpha = - \text{ }$$

$$\cos \beta = - \text{ }$$

$$\sin \beta = - \text{ }$$

$$\sin(\beta - \alpha) = - \text{ }$$

$$\begin{aligned} \Delta Y \times \textcircled{1} &= - \\ \Delta X \times \textcircled{2} &= - \\ F &= \end{aligned}$$

$$S_2 = \frac{F}{\textcircled{5}} = \text{ }$$

$$\begin{aligned} S_2 \times \textcircled{3} &= - \\ X_2 &= - \\ X &= - \end{aligned}$$

$$\begin{aligned} S_2 \times \textcircled{4} &= - \\ Y_2 &= - \\ Y &= - \end{aligned}$$

各筆面積計算集計表

ブロック 番号	各筆確定				備 考	備 考	各筆確定				備 考
	各筆 番号	面 m ²	積 坪	積 坪			各筆 番号	面 m ²	積 坪	積 坪	
20	①	4.074	170	12.32	44						
						計					
							m ²			坪	
						ブロック計算=	4.074・170		ブロック計算=	12.32・44	
						各筆集計=	4.074・170 (-		各筆集計=	12.32・44 (-	
						Σ =	.000		Σ =	.00	

協和建設測量