

## B. BERECHNUNG DER BEOBACHTUNGEN.

### Erstes Capitel.

#### Dreiecke.

##### I. Berechnung der Hauptdreiecke zwischen den Signalen.

Aus den Seite 19—45 gegebenen Richtungswinkeln und Basis-Längen haben wir zunächst zur Berechnung der Dreiecke zu schreiten, da die geodätischen Distanzen das Fundament zu den übrigen Rechnungen bilden.

In der Fig. 5 ist ein Schema unserer Signal-Puncte gegeben. Diese bildeten zwischen jeder Station ein Viereck:  $P^n A^n P^{n+1} B^n$ , dessen kurze Diagonale  $A^n B^n$ , die Basis, unmittelbar gemessen, und in welchem sowohl die 4 Winkel an den Spitzen:  $P^n, A^n, P^{n+1}, B^n$ , als auch die um die Diagonalen liegenden partiellen Winkel:  $A^n P^n P^{n+1}, P^{n+1} P^n B^n, P^n A^n B^n, P^{n+1} A^n B^n, A^n P^{n+1} P^n, P^n P^{n+1} B^n, P^{n+1} B^n A^n, A^n B^n P^n$ , oder überhaupt 8 Winkel bekannt sind. Die Auflösung des Vierecks ist somit überbestimmt, und die Winkel müssen auf eine zweckmässige Art ausgeglichen werden. Zuvörderst ist zu bemerken dass die Winkel an  $A^n, B^n$  eine bedeutend geringere Genauigkeit besitzen als die an  $P^n, P^{n+1}$ , erstens weil sie mit dem kleinen Universalinstrumente gemessen sind, hauptsächlich aber, weil sie wegen Zeitmangel meistens zur Zeit der allernachtheiligsten Bilder beobachtet werden mussten, wobei das Instrument auch vor Sonnenschein und Wind nicht beschirmt werden konnte. Es wird daher von der Wahrheit nicht sehr abweichen, wenn wir die Genauigkeit dieser Winkel zu den an den Hauptsignalen  $P$  mit dem grossen Universalinstrumente bei günstigerer Luft gemessenen, wie 1 zu 3 setzen, während unter günstigen Umständen mit dem kleinen Instrumente wohl reichlich die Hälfte der Genauigkeit des grossen erreichbar ist. Ausserdem aber sind diese Winkel für die geodätischen Entfernungen von geringem Einflusse, weil sie meist nahe an  $90^\circ$  liegen.

Bei der Berechnung wurden zunächst die 4 Winkel des Vierecks:  $P^n, A^n, P^{n+1}, B^n$ , summirt, und der positive oder negative Ueberschuss dieser Summe über  $360^\circ$  auf die Winkel so vertheilt, dass auf  $P^n, P^{n+1}$  je  $\frac{1}{3}$ , auf  $A^n, B^n$  je  $\frac{2}{3}$  desselben kam. Mit den so verbesserten Winkeln  $P^n$  und  $P^{n+1}$  wurden die Winkel der Dreiecke  $P^n A^n B^n$  und  $P^{n+1} A^n B^n$  summirt, und der übrigbleibende Fehler gegen  $180^\circ$  auf die Winkel



an  $A^n$  und  $B^n$  zur Hälfte vertheilt. Nun wurden mit den corrigirten Winkeln und der Basis  $A^n B^n$  die Seiten  $P^n A^n$ ,  $P^n B^n$ ,  $P^{n+1} A^n$ ,  $P^{n+1} B^n$  berechnet, und aus diesen Seiten zuletzt mit Zuziehung der corrigirten stumpfen Winkel an  $A^n$  oder  $B^n$  die Diagonale  $P^n P^{n+1}$ , deren Uebereinstimmung aus beiden Seitendreiecken die Richtigkeit der Rechnung controlirte. Die vorhin bezeichneten partiellen Winkel an  $P^n$  und  $P^{n+1}$  sind somit in der Rechnung nicht berücksichtigt worden, weil die übrigbleibenden möglichen kleinen Fehler in denselben auf die Distanzen von zu grossem Einflusse gewesen wären.

In dem nachfolgenden Tableau, welches alle die erwähnten Rechnungen enthält, und durch die Ueberschriften verständlich ist, habe ich zur Controle auch noch die Winkel der Dreiecke  $P^n A^n P^{n+1}$ ,  $P^n B^n P^{n+1}$ , und deren Summe gegeben, obgleich sie wie gesagt nicht benutzt wurden, damit man bei etwanigen auffallend grossen Fehlern der Summe der Winkel im Vierecke, durch dieselben erkennen könne, welcher von den stumpfen Winkeln an  $A^n$  oder  $B^n$  hauptsächlich einer Verbesserung bedürfe. —

Die Rechnungen selbst sind mit sechsstelligen Logarithmen von den Herren Fuss und Sawitsch doppelt geführt worden, und somit controlirt. Der sphärische Excess ist selbst bei den grössten vorkommenden Dreiecken als ganz unbedeutend, vernachlässiget worden.

Erstes Capitel

Dreiecke

I. Berechnung der Hauptdreiecke zwischen den Signalen

Das den Seite 19-25 gegebene Richtungswinkel und Base-Längen haben wir zunächst zur Berechnung der Dreiecke zu benutzen, da die geodätischen Höhen des Kontinents zu den übrigen Berechnungen bilden. In der Fig. 2 ist ein Schema unserer Signalfunkte gegeben. Diese bildeten zwischen jeder Station ein Viereck  $A^n B^n C^n D^n$ , dessen Seiten waren die Basen, unmittelbar gemessen, und in welchem so wohl die 4 Winkel an den Ecken  $A^n, B^n, C^n, D^n$  als auch die um die Ecken herum liegenden partiellen Winkel  $\alpha^n, \beta^n, \gamma^n, \delta^n$  oder überhaupt 8 Winkel bekannt sind. Die Auflösung des Vierecks ist schon überbestimmt, und die Winkel müssen zu einer zweckmässigen Art ausgeglichen werden. Zu bemerken ist zu bemerken dass die Winkel an  $A^n, B^n$  die beständig grössere Genauigkeit besitzen als die an  $C^n, D^n$ , meistens weil sie auf dem kleinsten Instrumente gemessen sind, hauptsächlich aber, weil sie einen Zusammenhang meistens zur Höhe der angrenzten Hügel besahen, wobei das Instrument auch vor Spandacken und Wind nicht beschützt werden konnte. Es wird daher von der Wahrheit nicht sehr abzusehen, wenn wir die Genauigkeit dieser Winkel zu den in den Hauptdreiecken  $P^n$  mit dem grossen Universalinstrumente beobachteten Längengraden wie 1 zu 2 setzen, während unter günstigen Umständen mit dem kleinen Instrumente wohl vielleicht die Hälfte der Genauigkeit des grossen Instrumentes ist. Ausserdem aber sind diese Winkel für die geodätischen Entfernungen von grossem Einflusse, weil sie meist nahe an  $90^\circ$  liegen.

In der Berechnung wurden zunächst die 4 Winkel des Vierecks  $A^n B^n C^n D^n$  summiert, und der positive oder negative Fehler dieser Summe über  $360^\circ$  auf die Winkel so vertheilt, dass auf  $A^n, B^n$  je  $\frac{1}{2}$  der Fehler, auf  $C^n, D^n$  je  $\frac{1}{2}$  der Fehler kam. Wollte man die Winkel  $A^n$  und  $B^n$  auf  $90^\circ$  setzen, so würde die Winkel der Dreiecke  $P^n A^n B^n$  und  $P^n B^n C^n$  summiert, und der übrigbleibende Fehler gegen  $180^\circ$  auf die Winkel



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Ver- bessert	A	B	$P^n$	Verb.	$p^{n+1}$	Verb.	
$P^1 = 144^\circ 36' 36,6$			$P^1 = 94^\circ 7' 46,4$		$P^2 = 4^\circ 49' 18,9$	19,0	$A^1 B^1 = 4,122390$
$A^1 = 186 30 57,5$			$A^1 = 61 49 6,9$		$A^1 = 50 28 50,2$	50,3	$P^1 A^1 = 4,457394$
$B^1 = 4 49 18,9$					$B^1 = 124 41 50,6$	50,7	$P^1 B^1 = 4,511064$
					$S = 179 59 59,7$		$P^2 A^1 = 5,112766$
							$P^2 B^1 = 5,085090$
							$P^1 P^2 = 5,187286$
$P^2 = 13 9 14,0$			$P^2 = 13 9 13,8$		$P^3 = 13 51 0,0$		$A^2 B^2 = 4,058601$
$A^2 = 165 50 53$			$A^2 = 92 59 11$		$A^2 = 72 51 42$	38,0	$P^2 A^2 = 4,684026$
$B^2 = 167 8 54$			$B^2 = 73 51 28$		$B^2 = 93 17 26$	22,0	$P^2 B^2 = 4,700903$
$P^3 = 13 51 0,2$			$S = 179 59 52,8$		$S = 180 0 8,0$		$P^3 A^2 = 4,678796$
$S = 360 0 1,2$							$P^3 B^2 = 4,659784$
							$P^2 P^3 = 4,979129$
$P^3 = 5 28 10,1$			$P^3 = 5 28 9,9$		$P^4 = 4 41 8,4$		$A^3 B^3 = 4,273963$
$A^3 = 174 47 17$			$A^3 = 87 45 57$		$A^3 = 87 1 20$	19,8	$P^3 A^3 = 5,294111$
$B^3 = 175 3 26$			$B^3 = 86 45 54$		$B^3 = 88 17 32$	31,8	$P^3 B^3 = 5,294474$
$P^4 = 4 41 8,6$			$S = 180 0 0,9$		$S = 180 0 0,4$		$P^4 A^3 = 5,361605$
$S = 360 0 1,7$							$P^4 B^3 = 5,361211$
							$P^3 P^4 = 5,629747$
$P^4 = 5 22 11,1$			$P^4 = 1^\circ 36' 18,3$		$P^5 = 5 36 46,9$		$A^4 B^4 = 4,140492$
$A^4 = 176 43 16$			$A^4 = 176 43 16$		$A^4 = 88 51 31$	27,0	$P^4 A^4 = 5,168843$
$B^4 = 172 18 0$			$B^4 = 172 18 0$		$B^4 = 85 31 50$	46,1	$P^4 B^4 = 5,169232$
$P^5 = 5 36 47,5$			$P^5 = 1 40 37,4$		$S = 179 59 52,9$		$P^5 A^4 = 5,148790$
$S = 360 0 4,6$			$S = 180 0 11,7$		$S = 180 0 7,9$		$P^5 B^4 = 5,150027$
							$P^4 P^5 = 5,459781$
$P^5 = 7 28 6,1$			$P^5 = 2 0 0,3$		$P^6 = 6 34 22,0$		$A^5 B^5 = 4,158212$
$A^5 = 176 14 42$			$A^5 = 176 14 42$		$A^5 = 88 32 12$	10,0	$P^5 A^5 = 5,042594$
$B^5 = 169 43 2$			$B^5 = 169 43 2$		$B^5 = 84 53 30$	28,0	$P^5 B^5 = 5,044021$
$P^6 = 6 34 23,7$			$P^6 = 1 45 33,3$		$S = 180 0 4,0$		$P^6 A^5 = 5,097811$
$S = 360 0 13,8$			$S = 180 0 15,6$				$P^6 B^5 = 5,099397$
							$P^5 P^6 = 5,371877$

\* P<sup>6</sup>



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	$P^n$	Verb.	$P^{n+1}$	Verb.	
$P^6 = 5^\circ 37' 48,0$	$P^6 = 19^\circ 6' 59,1$	$P^6 = 13^\circ 29' 11,1$	$P^6 = 5^\circ 37' 47,4$	$P^7 = 6^\circ 10' 53,0$	$A^6 B^6 = 4,196646$		
$A^6 = 139 55 59$	$B^6 = 151 44 36$	$A^6 = 69 40 31$	$A^6 = 27,8$	$A^6 = 70 15 28$	$P^6 A^6 = 5,190529$		
$B^6 = 208 15 24$	$P^7 = 20 57 2,0$	$B^6 = 104 41 48$	$B^6 = 44,8$	$B^6 = 103 33 36$	$P^6 B^6 = 5,177052$		
$P^7 = 6 10 53,6$	$S = 180 0 0,1$	$S = 179 59 55,5$	$S = 180 0 6,4$	$S = 179 59 57,0$	$P^7 A^6 = 5,152248$		
$S = 360 0 4,6$					$P^7 B^6 = 5,138219$		
					$P^6 P^7 = 5,445788$		
$P^7 = 4 36 15,0$	$P^7 = 5 13 32,0$	$P^7 = 0 37 17,0$	$P^7 = 4 36 15,2$	$P^8 = 3 56 42,9$	$A^7 B^7 = 4,172136$		
$A^7 = 170 18 12$	$B^7 = 178 51 11$	$A^7 = 78 47 39$	$A^7 = 39,9$	$A^7 = 91 30 33$	$P^7 A^7 = 5,264681$		
$B^7 = 181 8 49$	$P^8 = 4 28 7,8$	$B^7 = 96 36 4$	$B^7 = 44,5$	$B^7 = 84 32 45$	$P^7 B^7 = 5,259211$		
$P^8 = 3 56 42,7$	$S = 179 59 51,8$	$S = 179 59 58,2$		$S = 180 0 0,9$	$P^8 A^7 = 5,332557$		
$S = 359 59 58,7$					$P^8 B^7 = 5,334377$		
					$P^7 P^8 = 5,599426$		
$P^8 = 4 48 37,5$	$P^8 = 0 45 19,1$	$P^8 = 4 3 18,4$	$P^8 = 4 48 37,0$	$P^9 = 4 41 3,2$	$A^8 B^8 = 4,170617$		
$A^8 = 178 30 16$	$B^8 = 172 0 7$	$A^8 = 87 56 8$	$A^8 = 11,5$	$A^8 = 90 34 9$	$P^8 A^8 = 5,246581$		
$B^8 = 172 0 7$	$P^9 = 0 44 17,1$	$B^8 = 87 15 8$	$B^8 = 11,5$	$B^8 = 84 44 59$	$P^8 B^8 = 5,246798$		
$P^9 = 4 41 3,7$	$S = 179 59 52,2$	$S = 179 59 53,0$		$S = 180 0 10,2$	$P^9 A^8 = 5,256759$		
$S = 360 0 4,2$					$P^9 B^8 = 5,258565$		
					$P^8 P^9 = 5,552693$		
$P^9 = 4 45 30,8$	$P^9 = 1 51 9,9$	$P^9 = 2 54 20,9$	$P^9 = 4 45 31,5$	$P^{10} = 3 49 46,1$	$A^9 B^9 = 4,196767$		
$A^9 = 176 39 29$	$B^9 = 174 45 9$	$A^9 = 87 59 49$	$A^9 = 48,8$	$A^9 = 88 39 40$	$P^9 A^9 = 5,277394$		
$B^9 = 174 45 9$	$P^{10} = 1 29 25,5$	$B^9 = 87 14 40$	$B^9 = 39,7$	$B^9 = 87 30 29$	$P^9 B^9 = 5,277631$		
$P^{10} = 3 49 45,4$	$S = 180 0 4,4$	$S = 179 59 49,8$	$S = 180 0 0,5$	$S = 179 59 55,1$	$P^{10} A^9 = 5,371663$		
$S = 359 59 54,2$					$P^{10} B^9 = 5,371955$		
					$P^9 P^{10} = 5,627932$		
$P^{10} = 7 49 10,4$	$P^{10} = 3 21 47,2$	$P^{10} = 4 27 23,2$	$P^{10} = 7 49 9,6$	$P^{11} = 8 39 48,6$	$A^{10} B^{10} = 4,023578$		
$A^{10} = 172 54 16$	$B^{10} = 170 36 51$	$A^{10} = 85 39 22$	$A^{10} = 21,6$	$A^{10} = 87 14 54$	$P^{10} A^{10} = 4,889080$		
$B^{10} = 170 36 50,9$	$P^{11} = 3 44 10,0$	$B^{10} = 86 31 29,0$	$B^{10} = 28,8$	$B^{10} = 84 5 21,9$	$P^{10} B^{10} = 4,888631$		
$P^{11} = 8 39 49,4$	$S = 180 0 13,2$	$S = 179 59 53,6$	$S = 189 0 0,6$	$S = 180 0 4,5$	$P^{11} A^{10} = 4,843351$		
$S = 360 0 6,7$					$P^{11} B^{10} = 4,845165$		
					$P^{10} P^{11} = 5,167016$		



Winkel im Viereck	Verbessert	Winkel im Dreieck			Verb.	$P^{n+1}$	Log. der Seiten
		A	B	$P^n$			
$P^{11} = 6 \ 9 \ 29,9$	27,9					$A^{11} B^{11} = 4,024348$	
$A^{11} = 135^\circ \ 5' \ 7,6$	8,6	$P^{11} = 6^\circ \ 34' \ 42,9$	$P^{11} = (6^\circ 58' 25,3)$	$P^{12} = 6^\circ \ 34' \ 42,9$	$P^{12} = 6^\circ \ 34' \ 42,9$	$P^{11} A^{11} = 4,775161$	
$B^{11} = 211 \ 21 \ 39,6$	8,0	$B^{11} = 211^\circ \ 21' \ 39,6$	$A^{11} = 36 \ 11 \ 45,9$	$A^{11} = 98 \ 53 \ 21,7$	$A^{11} = 98 \ 53 \ 21,7$	$P^{11} B^{11} = 4,711259$	
$P^{12} = 6 \ 34 \ 42,9$	15,5	$P^{11} =$	$B^{11} = 136 \ 49 \ 48,8$	$B^{11} = 74 \ 31 \ 50,8$	$B^{11} = 74 \ 31 \ 50,8$	$P^{12} A^{11} = 4,949262$	
				$S = 179 \ 59 \ 55,4$	$S = 179 \ 59 \ 55,4$	$P^{12} B^{11} = 4,960044$	
						$P^{11} P^{12} = 5,139109$	
$P^{12} = 6 \ 9 \ 29,9$	27,9					$A^{12} B^{12} = 4,039335$	
$A^{12} = 172 \ 38 \ 14,5$	8,6	$P^{12} = 4 \ 0 \ 45,6$	$P^{12} = 6 \ 9 \ 27,9$	$P^{13} = 5 \ 8 \ 15,5$	$P^{13} = 5 \ 8 \ 15,5$	$P^{12} A^{12} = 5,008829$	
$B^{12} = 176 \ 4 \ 14,0$	8,0	$A^{12} = 172 \ 38 \ 14,5$	$B^{12} = 84 \ 38 \ 58,0$	$A^{12} = 87 \ 59 \ 16,5$	$A^{12} = 87 \ 59 \ 16,5$	$P^{12} B^{12} = 5,006975$	
$P^{13} = 5 \ 8 \ 17,5$	15,5	$P^{13} = 3 \ 21 \ 12,6$	$B^{12} = 89 \ 11 \ 48,5$	$B^{12} = 41,3$	$B^{12} = 86 \ 52 \ 25,5$	$P^{13} A^{12} = 5,086629$	
		$S = 180 \ 0 \ 12,7$	$S = 180 \ 0 \ 14,4$	$S = 179 \ 59 \ 57,5$	$S = 179 \ 59 \ 57,5$	$P^{13} B^{12} = 5,087008$	
						$P^{12} P^{13} = 5,348610$	
$P^{13} = 6 \ 20 \ 45,4$	46,4					$A^{13} B^{13} = 4,187650$	
$A^{13} = 160 \ 58 \ 46$	48,8	$P^{13} = 10 \ 12 \ 16,3$	$P^{13} = 3 \ 51 \ 30,9$	$P^{14} = 5 \ 41 \ 18,0$	$P^{14} = 5 \ 41 \ 18,0$	$P^{13} A^{13} = 5,117645$	
$B^{13} = 186 \ 59 \ 4$	6,8	$A^{13} = 160 \ 58 \ 46$	$B^{13} = 63 \ 50 \ 16$	$A^{13} = 97 \ 8 \ 30$	$A^{13} = 97 \ 8 \ 30$	$P^{13} B^{13} = 5,097216$	
$P^{14} = 5 \ 41 \ 16,9$	18,0	$P^{14} = 8 \ 48 \ 59,3$	$B^{13} = 109 \ 48 \ 31$	$B^{13} = 44,3$	$B^{13} = 77 \ 10 \ 33$	$P^{14} A^{13} = 5,180524$	
		$S = 180 \ 0 \ 1,6$	$S = 179 \ 59 \ 33,4$	$S = 180 \ 0 \ 21,0$	$S = 180 \ 0 \ 21,0$	$P^{14} B^{13} = 5,188119$	
						$P^{13} P^{14} = 5,445373$	
$P^{14} = 5 \ 22 \ 17,1$	18,8					$A^{14} B^{14} = 4,049261$	
$A^{14} = 168 \ 50 \ 18$	23,2	$P^{14} =$	$P^{14} = 5 \ 22 \ 18,8$	$P^{15} = 3 \ 56 \ 1,8$	$P^{15} = 3 \ 56 \ 1,8$	$P^{14} A^{14} = 5,076833$	
$B^{14} = 181 \ 51 \ 11$	16,2	$A^{14} = 168 \ 50 \ 18$	$A^{14} = 80 \ 37 \ 12$	$A^{14} = 88 \ 13 \ 6$	$A^{14} = 88 \ 13 \ 6$	$P^{14} B^{14} = 5,072048$	
$P^{15} = 3 \ 56 \ 0,0$	1,8	$P^{15} = 4 \ 42 \ 54,4$	$B^{14} = 94 \ 0 \ 44$	$B^{14} = 36,6$	$B^{14} = 87 \ 50 \ 27$	$P^{15} A^{14} = 5,212608$	
		$S = 359 \ 59 \ 46,1$	$S = 180 \ 0 \ 14,8$	$S = 179 \ 59 \ 34,8$	$S = 179 \ 59 \ 34,8$	$P^{15} B^{14} = 5,212705$	
						$P^{14} P^{15} = 5,449022$	
$P^{15} = 7 \ 25 \ 56,7$	55,2					$A^{15} B^{15} = 4,068568$	
$A^{15} = 179 \ 23 \ 20$	15,2	$P^{15} = 0 \ 17 \ 33,2$	$P^{15} = 7 \ 8 \ 23,5$	$P^{16} = 8 \ 11 \ 39,4$	$P^{16} = 8 \ 11 \ 39,4$	$P^{15} A^{15} = 4,952444$	
$B^{15} = 164 \ 59 \ 15$	10,2	$A^{15} = 179 \ 23 \ 20$	$B^{15} = 164 \ 59 \ 15$	$A^{15} = 88 \ 43 \ 10$	$A^{15} = 88 \ 43 \ 10$	$P^{15} B^{15} = 4,956771$	
$P^{16} = 8 \ 11 \ 40,9$	39,4	$P^{16} = 0 \ 19 \ 13,8$	$B^{15} = 81 \ 53 \ 49$	$B^{15} = 51,9$	$B^{15} = 83 \ 5 \ 26$	$P^{16} A^{15} = 4,911492$	
		$S = 180 \ 0 \ 7,0$	$S = 179 \ 59 \ 54,2$	$S = 180 \ 0 \ 15,4$	$S = 180 \ 0 \ 15,4$	$P^{16} B^{15} = 4,914550$	
						$P^{15} P^{16} = 5,233474$	



Winkel im Viereck	Ver- bessert	Winkel im Dreieck			Verb.	Log. der Seiten
		A	B	P <sup>n</sup>		
P <sup>16</sup> = 6° 22' 1,9	2,8					A <sup>16</sup> B <sup>16</sup> = 4,096298
A <sup>16</sup> = 188 36 9	15,1	P <sup>16</sup> = 4° 29' 33,3	P <sup>16</sup> = 10° 51' 35,2	P <sup>16</sup> = 6° 22' 2,8	P <sup>17</sup> = 5° 51' 59,0	P <sup>16</sup> A <sup>16</sup> = 5,042594
B <sup>16</sup> = 159 9 37	43,1	A <sup>16</sup> = 171 23 51	B <sup>16</sup> = 159 9 37	A <sup>16</sup> = 95 5 56	A <sup>16</sup> = 93 30 13	P <sup>16</sup> B <sup>16</sup> = 5,049627
P <sup>17</sup> = 5 51 58,1	59,0	P <sup>17</sup> = 4 6 49,3	P <sup>17</sup> = 9 58 47,4	B <sup>16</sup> = 78 32 3	B <sup>16</sup> = 80 37 34	P <sup>17</sup> A <sup>16</sup> = 5,080972
S = 359 59 46,0		S = 180 0 13,6	S = 179 59 59,6	S = 180 0 1,8	S = 179 59 46,0	P <sup>17</sup> B <sup>16</sup> = 5,085995
P <sup>17</sup> = 9 30 2,6	2,4					P <sup>16</sup> P <sup>17</sup> = 5,362014
A <sup>17</sup> = 189 14 1	0,4	P <sup>17</sup> =	P <sup>17</sup> = 9 30 2,4		P <sup>18</sup> = 2 34 58,8	A <sup>17</sup> B <sup>17</sup> = 4,153870
B <sup>17</sup> = 167 40 59	58,4	A <sup>17</sup> = 189 14 1	B <sup>17</sup> = 167 40 59	A <sup>17</sup> = 84 49 50	A <sup>17</sup> = 95 24 11	P <sup>17</sup> A <sup>17</sup> = 4,934989
P <sup>18</sup> = 2 34 59,0	58,8	P <sup>18</sup> = 0 3 4,3	P <sup>18</sup> = 2 38 3,3	B <sup>17</sup> = 85 40 16	B <sup>17</sup> = 82 0 4,3	P <sup>17</sup> B <sup>17</sup> = 4,934460
S = 360 0 1,6		S = 180 0 8,4	S = 180 0 8,4	S = 180 0 8,4	S = 179 59 52,8	P <sup>18</sup> A <sup>17</sup> = 5,495782
P <sup>18</sup> = 5 26 20,2	19,1					P <sup>18</sup> B <sup>17</sup> = 5,498080
A <sup>18</sup> = 200 32 12	51,6	P <sup>18</sup> = 11 21 59,2	P <sup>18</sup> = 16 48 19,4	P <sup>18</sup> = 5 26 19,1	P <sup>19</sup> = 4 24 23,8	A <sup>18</sup> B <sup>18</sup> = 4,038630
B <sup>18</sup> = 149 37 29	25,5	A <sup>18</sup> = 159 27 48	B <sup>18</sup> = 149 37 29	A <sup>18</sup> = 99 59 58	A <sup>18</sup> = 100 32 14	P <sup>18</sup> A <sup>18</sup> = 5,045993
P <sup>19</sup> = 4 24 24,9	23,8	P <sup>19</sup> = 9 9 55,7	P <sup>19</sup> = 13 34 20,6	B <sup>18</sup> = 74 33 48	B <sup>18</sup> = 75 3 4,1	P <sup>18</sup> B <sup>18</sup> = 5,055303
S = 360 0 26,1		S = 179 59 42,9	S = 180 0 9,0	S = 180 0 5,1	S = 180 0 18,8	P <sup>19</sup> A <sup>18</sup> = 5,138182
P <sup>19</sup> = 8 48 3,8	3,8					P <sup>19</sup> B <sup>18</sup> = 5,145737
A <sup>19</sup> = 171 36 16	15,9	P <sup>19</sup> = 4 32 23,9	P <sup>19</sup> = 4 15 39,9	P <sup>19</sup> = 8 48 3,8	P <sup>20</sup> = 7 29 19,5	A <sup>19</sup> B <sup>19</sup> = 3,914060
B <sup>19</sup> = 172 6 21	20,8	A <sup>19</sup> = 171 36 16	B <sup>19</sup> = 172 6 21	A <sup>19</sup> = 85 32 4,5	A <sup>19</sup> = 86 3 31	P <sup>19</sup> A <sup>19</sup> = 4,728110
P <sup>20</sup> = 7 29 19,5	19,5	P <sup>20</sup> = 3 51 45,6	P <sup>20</sup> = 3 37 33,9	B <sup>19</sup> = 85 39 18	B <sup>19</sup> = 86 27 3	P <sup>19</sup> B <sup>19</sup> = 4,728046
S = 360 0 0,3		S = 180 0 25,5	S = 179 59 34,8	S = 180 0 6,8	S = 179 59 53,5	P <sup>20</sup> A <sup>19</sup> = 4,798181
P <sup>20</sup> = 4 36 22,1	21,5					P <sup>20</sup> B <sup>19</sup> = 4,797987
A <sup>20</sup> = 182 9 40	38,1	P <sup>20</sup> = 0 58 3,6	P <sup>20</sup> = 5 34 25,7	P <sup>20</sup> = 4 36 21,5	P <sup>21</sup> = 5 40 7,3	A <sup>20</sup> B <sup>20</sup> = 4,159068
B <sup>20</sup> = 167 33 55	53,1	A <sup>20</sup> = 177 50 20	B <sup>20</sup> = 167 33 55	A <sup>20</sup> = 91 29 56	A <sup>20</sup> = 90 39 4,4	P <sup>20</sup> A <sup>20</sup> = 5,251897
P <sup>21</sup> = 5 40 7,9	7,3	P <sup>21</sup> = 1 11 20,1	P <sup>21</sup> = 6 51 28,0	B <sup>20</sup> = 83 54 10	B <sup>20</sup> = 83 39 4,5	P <sup>20</sup> B <sup>20</sup> = 5,254202
S = 360 0 5,0		S = 179 59 43,7	S = 179 59 48,7	S = 180 0 27,5	S = 179 59 36,3	P <sup>21</sup> A <sup>20</sup> = 5,161768
P <sup>21</sup> = 5 51 10,1	10,1					P <sup>21</sup> B <sup>20</sup> = 5,164398
S = 360 0 5,0						P <sup>20</sup> P <sup>21</sup> = 5,510120

Anmerk. Der ungewöhnlich grosse Fehler von 26'' in der Summe der 4 Winkel deutet auf ein Versehen bei einem der stumpfen. Da dieses durch das Seitendreieck A bestätigt wird, so ist bei der Ausgleichung von dem Winkel A<sup>18</sup> zuerst 17'' abgezogen worden.



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	P <sup>n</sup>	Verb.	P <sup>n+1</sup>	Verb.	
P <sup>21</sup> = 5° 0' 7,5	P <sup>21</sup> = 2° 25' 52,2	P <sup>21</sup> = 2° 34' 15,2	P <sup>21</sup> = 5° 0' 7,5	P <sup>22</sup> = 6° 45' 58,6	A <sup>21</sup> B <sup>21</sup> = 4,108876		
A <sup>21</sup> = 174 16 38	A <sup>21</sup> = 174 16 38	B <sup>21</sup> = 173 57 15	A <sup>21</sup> = 87 12 16	A <sup>21</sup> = 87 4 22	P <sup>21</sup> A <sup>21</sup> = 5,168077		
B <sup>21</sup> = 173 57 15	P <sup>22</sup> = 3 17 38,1	P <sup>22</sup> = 3 28 20,4	B <sup>21</sup> = 87 12 16	B <sup>21</sup> = 86 9 36	P <sup>21</sup> B <sup>21</sup> = 5,167881		
P <sup>22</sup> = 6 45 58,5	S = 180 0 8,3	S = 179 59 50,6	B <sup>21</sup> = 87 47 39	S = 179 59 56,6	P <sup>22</sup> A <sup>21</sup> = 5,036683		
S = 359 59 58,9			S = 180 0 2,5		P <sup>22</sup> B <sup>21</sup> = 5 037092		
					P <sup>21</sup> P <sup>22</sup> = 5,407830		
P <sup>22</sup> = 4 7 11,7	P <sup>22</sup> = 3 8 42,0	P <sup>22</sup> = 0 58 29,7	P <sup>22</sup> = 4 7 10,7	P <sup>23</sup> = 9 51 15,7	A <sup>22</sup> B <sup>22</sup> = 3,953716		
A <sup>22</sup> = 169 20 4	B <sup>22</sup> = 176 42 1	B <sup>22</sup> = 176 42 1	A <sup>22</sup> = 85 3 17	A <sup>22</sup> = 84 16 47	P <sup>22</sup> A <sup>22</sup> = 5,097312		
B <sup>22</sup> = 176 42 1	P <sup>23</sup> = 7 31 40,1	P <sup>23</sup> = 2 19 36,6	B <sup>22</sup> = 90 49 46	B <sup>22</sup> = 85 52 15	P <sup>22</sup> B <sup>22</sup> = 5,095736		
P <sup>23</sup> = 9 51 16,7	S = 180 0 26,1	S = 180 0 7,3	S = 180 0 13,7	S = 180 0 17,7	P <sup>23</sup> A <sup>22</sup> = 4,719225		
S = 360 0 33,4					P <sup>23</sup> B <sup>22</sup> = 4,718184		
					P <sup>22</sup> P <sup>23</sup> = 5,247640		
Anm. Von dem Winkel A <sup>22</sup> sind vor der Ausgleichung 26" abgezogen worden.							
P <sup>23</sup> = 7 42 8,6	P <sup>23</sup> = 4 15 5,4	P <sup>23</sup> = 11 57 14,0	P <sup>23</sup> = 7 42 7,6	P <sup>24</sup> = 3 36 47,6	A <sup>23</sup> B <sup>23</sup> = 4,158021		
A <sup>23</sup> = 186 15 35	A <sup>23</sup> = 173 44 25	B <sup>23</sup> = 162 25 36	A <sup>23</sup> = 90 26 19	A <sup>23</sup> = 95 49 16	P <sup>23</sup> A <sup>23</sup> = 5,026444		
B <sup>23</sup> = 162 25 36	P <sup>24</sup> = 2 0 19,8	P <sup>24</sup> = 5 37 8,4	B <sup>23</sup> = 81 51 46	B <sup>23</sup> = 80 33 50	P <sup>23</sup> B <sup>23</sup> = 5,030827		
P <sup>24</sup> = 3 36 48,6	S = 179 59 50,2	S = 179 59 58,4	S = 180 0 12,6	S = 179 59 53,6	P <sup>24</sup> A <sup>23</sup> = 5,352614		
S = 360 0 8,2					P <sup>24</sup> B <sup>23</sup> = 5,356285		
					P <sup>23</sup> P <sup>24</sup> = 5,519923		
P <sup>24</sup> = 5 17 1,8	P <sup>24</sup> = 3 24 13,8	P <sup>24</sup> = 1 52 48,0	P <sup>24</sup> = 5 17 0,6	P <sup>25</sup> = 5 8 40,0	A <sup>24</sup> B <sup>24</sup> = 4,205228		
A <sup>24</sup> = 173 16 56	B <sup>24</sup> = 173 16 56	B <sup>24</sup> = 176 17 31	A <sup>24</sup> = 86 4 46	A <sup>24</sup> = 87 12 10	P <sup>24</sup> A <sup>24</sup> = 5,210921		
B <sup>24</sup> = 176 17 31	P <sup>25</sup> = 3 18 57,5	P <sup>25</sup> = 1 49 43,7	B <sup>24</sup> = 88 38 23	B <sup>24</sup> = 87 39 8	P <sup>24</sup> B <sup>24</sup> = 5,210026		
P <sup>25</sup> = 5 8 41,2	S = 180 0 7,3	S = 180 0 2,7	S = 180 0 9,6	S = 359 59 58,0	P <sup>25</sup> A <sup>24</sup> = 5,252231		
S = 360 0 10,0					P <sup>25</sup> B <sup>24</sup> = 5,252078		
					P <sup>24</sup> P <sup>25</sup> = 5,546898		
P <sup>25</sup> = 5 39 36,3	P <sup>25</sup> = 3 10 32,1	P <sup>25</sup> = 2 29 4,2	P <sup>25</sup> = 5 39 37,5	P <sup>26</sup> = 5 32 6,9	A <sup>25</sup> B <sup>25</sup> = 4,086157		
A <sup>25</sup> = 173 42 50	B <sup>25</sup> = 173 42 50	B <sup>25</sup> = 175 5 18	A <sup>25</sup> = 86 37 39	A <sup>25</sup> = 87 5 11	P <sup>25</sup> A <sup>25</sup> = 5,091792		
B <sup>25</sup> = 175 5 18	P <sup>26</sup> = 3 6 24,9	P <sup>26</sup> = 2 25 40,8	B <sup>25</sup> = 87 42 46	B <sup>25</sup> = 87 22 32	P <sup>25</sup> B <sup>25</sup> = 5,091386		
P <sup>26</sup> = 5 32 5,7	S = 179 59 47,0	S = 180 0 3,0	S = 180 0 2,5	S = 179 59 49,9	P <sup>26</sup> A <sup>25</sup> = 5,101364		
S = 359 59 50,0					P <sup>26</sup> B <sup>25</sup> = 5,101258		
					P <sup>25</sup> P <sup>26</sup> = 5,396978		



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	$\mu^a$	Verb.	$\mu^{n+1}$	Verb.	
$P^{26} = 5^\circ 54' 58,6$ $A^{26} = 173 18 48$ $B^{26} = 175 5 2$ $P^{27} = 5 41 18,2$ $S = 360 0 6,8$	$P^{26} = 3^\circ 24' 45,8$ $A^{26} = 173 18 48$ $P^{27} = 3 16 33,1$ $S = 180 0 6,9$	$P^{26} = 2^\circ 30' 42,8$ $B^{26} = 175 5 2$ $P^{27} = 2 24 45,1$ $S = 179 59 59,9$	$P^{26} = 5^\circ 54' 57,8$ $A^{26} = 87 36 12$ $B^{26} = 86 28 36$ $S = 179 59 45,8$	$P^{27} = 5^\circ 41' 17,4$ $A^{26} = 85 42 36$ $B^{26} = 88 36 26$ $S = 180 0 19,4$	$P^{27} = 5^\circ 41' 17,4$ $A^{26} = 85 42 36$ $B^{26} = 88 36 26$ $S = 180 0 19,4$	$A^{26} B^{26} = 4,038119$ $P^{26} A^{26} = 5,024160$ $P^{26} B^{26} = 5,024602$ $P^{27} A^{26} = 5,041849$ $P^{27} B^{26} = 5,040757$ $P^{26} P^{27} = 5,333383$	
$P^{27} = 6 12 32,8$ $A^{27} = 172 49 6$ $B^{27} = 174 26 52$ $P^{28} = 6 31 43,7$ $S = 360 0 14,5$	$P^{27} = 3 30 2,4$ $A^{27} = 172 49 6$ $P^{28} = 3 41 3,1$ $S = 180 0 11,5$	$P^{27} = 2 42 30,4$ $B^{27} = 174 26 52$ $P^{28} = 2 50 40,6$ $S = 180 0 3,0$	$P^{27} = 6 12 31,0$ $A^{27} = 86 14 15$ $B^{27} = 87 33 24$ $S = 180 0 10,0$	$P^{28} = 6 31 41,9$ $A^{27} = 86 34 51$ $B^{27} = 86 53 28$ $S = 180 0 0,9$	$P^{28} = 6 31 41,9$ $A^{27} = 86 34 51$ $B^{27} = 86 53 28$ $S = 180 0 0,9$	$A^{27} B^{27} = 4,169401$ $P^{27} A^{27} = 5,134991$ $P^{27} B^{27} = 5,134448$ $P^{28} A^{27} = 5,113029$ $P^{28} B^{27} = 5,112895$ $P^{27} P^{28} = 5,424326$	
$P^{28} = 4 23 20,7$ $A^{28} = 175 55 36$ $B^{28} = 174 47 29$ $P^{29} = 4 53 34,7$ $S = 360 0 0,5$	$P^{28} = 1 55 37,3$ $A^{28} = 175 55 36$ $P^{29} = 2 8 46,8$ $S = 180 0 0,1$	$P^{28} = 2 27 43,4$ $B^{28} = 174 47 29$ $P^{29} = 2 44 48,0$ $S = 180 0 0,4$	$P^{28} = 4 23 20,7$ $A^{28} = 88 13 25$ $B^{28} = 87 23 27$ $S = 180 0 12,7$	$P^{29} = 4 53 34,8$ $A^{28} = 87 42 11$ $B^{28} = 87 24 2$ $S = 179 59 47,8$	$P^{29} = 4 53 34,8$ $A^{28} = 87 42 11$ $B^{28} = 87 24 2$ $S = 179 59 47,8$	$A^{28} B^{28} = 4,163954$ $P^{28} A^{28} = 5,279677$ $P^{28} B^{28} = 5,279919$ $P^{29} A^{28} = 5,232584$ $P^{29} B^{28} = 5,232682$ $P^{28} P^{29} = 5,557525$	
$P^{29} = 5 29 30,8$ $A^{29} = 177 15 38$ $B^{29} = 170 45 7$ $P^{30} = 6 29 50,9$ $S = 360 0 6,7$	$P^{29} = 1 15 21,9$ $A^{29} = 177 15 38$ $P^{30} = 1 29 2,7$ $S = 180 0 2,6$	$P^{29} = 4 1 8,9$ $B^{29} = 170 45 7$ $P^{30} = 5 0 48,2$ $S = 180 0 4,1$	$P^{29} = 5 29 30,0$ $A^{29} = 89 5 49$ $B^{29} = 85 24 40$ $S = 179 59 59,0$	$P^{30} = 6 29 50,1$ $A^{29} = 88 9 49$ $B^{29} = 85 20 27$ $S = 180 0 6,1$	$P^{30} = 6 29 50,1$ $A^{29} = 88 9 49$ $B^{29} = 85 20 27$ $S = 180 0 6,1$	$A^{29} B^{29} = 4,160117$ $P^{29} A^{29} = 5,177805$ $P^{29} B^{29} = 5,179145$ $P^{30} A^{29} = 5,105001$ $P^{30} B^{29} = 5,106216$ $P^{29} P^{30} = 5,443835$	
$P^{30} = 6 14 43,7$ $A^{30} = 177 28 24$ $B^{30} = 171 58 12$ $P^{31} = 4 18 21,8$ $S = 359 59 41,5$	$P^{30} = 1 29 55,7$ $A^{30} = 177 28 24$ $P^{31} = 1 1 23,2$ $S = 179 59 42,9$	$P^{30} = 4 44 48,0$ $B^{30} = 171 58 12$ $P^{31} = 3 16 58,6$ $S = 179 59 58,6$	$P^{30} = 6 14 46,0$ $A^{30} = 91 7 49$ $B^{30} = 82 37 28$ $S = 180 0 3,0$	$P^{31} = 4 18 24,1$ $A^{30} = 86 20 35$ $B^{30} = 89 20 44$ $S = 179 59 43,1$	$P^{31} = 4 18 24,1$ $A^{30} = 86 20 35$ $B^{30} = 89 20 44$ $S = 179 59 43,1$	$A^{30} P^{30} = 4,098775$ $P^{30} A^{30} = 5,058542$ $P^{30} B^{30} = 5,062066$ $P^{31} A^{30} = 5,223138$ $P^{31} B^{30} = 5,222282$ $P^{30} P^{31} = 5,449519$	



Winkel im Viereck		Winkel im Dreieck			Log. der Seiten	
Winkel	Verbessert	A	B	$p^n$	$p^{n+1}$	Verb.
$P^{31} = 7^\circ 17' 19,8$	18,0	$P^{31} = 19^\circ 28' 38,6$	$P^{31} = 26^\circ 45' 58,4$	$P^{31} = 7^\circ 17' 18,0$	$P^{32} = 7^\circ 22' 41,3$	$A^{31} B^{31} = 4,154555$
$A^{31} = 218 49 10$	4,4	$P^{31} = 19^\circ 28' 38,6$	$P^{31} = 26^\circ 45' 58,4$	$P^{31} = 7^\circ 17' 18,0$		$P^{31} A^{31} = 4,997885$
$B^{31} = 126 31 2$	56,3	$A^{31} = 141 10 50$	$B^{31} = 126 31 2$	$A^{31} = 110 31 49$	20,9	$P^{31} B^{31} = 5,022719$
$P^{32} = 7 22 43,1$	41,3	$P^{32} = 19 20 20,7$	$P^{32} = 26 43 3 8$	$B^{31} = 62 11 4$	57,8	$P^{32} A^{31} = 5,000807$
$S = 360 0 14,9$		$S = 179 59 49,3$	$S = 180 0 4,2$	$S = 180 0 11,0$	0,3	$P^{32} B^{31} = 5,023415$
						$P^{31} P^{32} = 5,274970$
$P^{32} = 7 9 58,8$	58,8	$P^{32} = 3 47 26,5$	$P^{32} = 3 22 32,3$	$P^{32} = 7 9 58,8$	$P^{33} = 6 19 4,5$	$A^{32} B^{32} = 4,176583$
$A^{32} = 172 51 52$	51,9	$P^{32} = 3 47 26,5$	$P^{32} = 3 22 32,3$	$P^{32} = 7 9 58,8$		$P^{32} A^{32} = 5,079992$
$B^{32} = 173 39 5$	4,8	$A^{32} = 172 51 52$	$B^{32} = 173 39 5$	$A^{32} = 85 42 48$	0,3	$P^{32} B^{32} = 5,079325$
$P^{33} = 6 19 4,5$	4,5	$P^{33} = 3 20 42,7$	$P^{33} = 2 58 21,8$	$B^{32} = 87 7 6$	55,2	$P^{33} A^{32} = 5,134216$
$S = 360 0 0,3$		$S = 180 0 1,2$	$S = 179 59 59,1$	$S = 179 59 52,8$	7,5	$P^{33} B^{32} = 5,134475$
						$P^{32} P^{33} = 5,408141$
$P^{33} = 5 28 52,6$	51,5	$P^{33} = 0 23 42,8$	$P^{33} = 5 5 9,8$	$P^{33} = 5 28 51,5$	$P^{34} = 5 32 28,4$	$A^{33} B^{33} = 4,114020$
$A^{33} = 179 1 26$	22,5	$P^{33} = 0 23 42,8$	$P^{33} = 5 5 9,8$	$P^{33} = 5 28 51,5$		$P^{33} A^{33} = 5,132382$
$B^{33} = 169 46 21$	17,6	$A^{33} = 179 12 26$	$B^{33} = 169 46 21$	$A^{33} = 89 23 3$	36,8	$P^{33} B^{33} = 5,133923$
$P^{34} = 5 32 29,5$	28,4	$P^{34} = 0 24 3,7$	$P^{34} = 5 8 25,8$	$B^{33} = 85 8 40$	54,8	$P^{34} A^{33} = 5,127307$
$S = 360 0 9,1$		$S = 180 0 12,5$	$S = 179 59 56,6$	$S = 180 0 34,5$		$P^{34} B^{33} = 5,129213$
						$P^{33} P^{34} = 5,430870$
$P^{34} = 3 50 57,4$	57,8	$P^{34} = 2 32 29,1$	$P^{34} = 1 18 28,3$	$P^{34} = 3 50 57,8$	$P^{35} = 9 39 46,8$	$A^{34} B^{34} = 4,062793$
$A^{34} = 171 5 58$	59,2	$P^{34} = 2 32 29,1$	$P^{34} = 1 18 28,3$	$P^{34} = 3 50 57,8$		$P^{34} A^{34} = 5,235485$
$B^{34} = 175 23 15$	16,2	$A^{34} = 171 5 58$	$B^{34} = 175 23 15$	$A^{34} = 88 31 4$	55,6	$P^{34} B^{34} = 5,235710$
$P^{35} = 9 39 46,4$	46,8	$P^{35} = 6 21 40,9$	$P^{35} = 3 18 5,5$	$B^{34} = 87 37 59$	17,6	$P^{35} A^{34} = 4,837534$
$S = 359 59 56,8$		$S = 180 0 8,0$	$S = 179 59 48,8$	$S = 180 0 0,8$		$P^{35} B^{34} = 4,834217$
						$P^{34} P^{35} = 5,380538$
$P^{35} = 3 16 10,1$	8,5	$P^{35} = 12 2 39,7$	$P^{35} = 8 46 29,6$	$P^{35} = 3 16 8,5$	$P^{36} = 3 30 22,4$	$A^{35} B^{35} = 4,118801$
$A^{35} = 155 2 0$	55,0	$P^{35} = 12 2 39,7$	$P^{35} = 8 46 29,6$	$P^{35} = 3 16 8,5$		$P^{35} A^{35} = 5,357026$
$B^{35} = 198 11 39$	34,1	$A^{35} = 155 2 0$	$B^{35} = 161 48 21$	$A^{35} = 77 27 39$	21,8	$P^{35} B^{35} = 5,352249$
$P^{36} = 3 30 24,0$	22,4	$P^{36} = 12 55 23,3$	$P^{36} = 9 24 59,3$	$B^{35} = 99 16 24$	15,8	$P^{36} A^{35} = 5,327067$
$S = 360 0 13,1$		$S = 180 0 3,0$	$S = 179 59 49,9$	$S = 180 0 11,5$		$P^{36} B^{35} = 5,322051$
						$P^{35} P^{36} = 5,632959$

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Winkel im Viereck	Verbessert	Winkel im Dreieck				Verb.	Log. der Seiten
		A	B	$p^n$	$p^{n+1}$		
$P^{36} = 4^\circ 1' 9,7$	$9,9$	$P^{36} = 4^\circ 13' 14,1$	$P^{36} = 0^\circ 12' 4,4$	$P^{36} = 4^\circ 1' 9,9$	$P^{37} = 4^\circ 50' 34,5$	$A^{36} B^{36} = 4,159387$	
$A^{36} = 170 41 43$	$43,8$	$B^{36} = 170 41 43$	$B^{36} = 179 33 29$	$A^{36} = 85 35 30$	$A^{36} = 85 6 13$	$P^{36} A^{36} = 5,313693$	
$B^{36} = 180 26 31$	$31,8$	$P^{37} = 5 5 1,3$	$P^{37} = 0 14 27,0$	$B^{36} = 90 23 20$	$B^{36} = 90 3 11$	$P^{36} B^{36} = 5,312416$	
$P^{37} = 4 50 34,3$	$34,5$	$S = 179 59 58,4$	$S = 180 0 0,4$	$S = 179 59 59,9$	$S = 179 59 58,5$	$P^{37} A^{36} = 5,232920$	
$S = 359 59 58,0$						$P^{37} B^{36} = 5 231332$	
						$P^{36} P^{37} = 5,574794$	
$P^{37} = 5 34 7,9$	$6,8$	$P^{37} = 6 7 36,7$	$P^{37} = 0 33 28,8$	$P^{37} = 5 34 6,8$	$P^{38} = 4 32 45,8$	$A^{37} B^{37} = 4,221414$	
$A^{37} = 168 52 19$	$15,7$	$B^{37} = 168 52 19$	$B^{37} = 178 59 5$	$A^{37} = 83 53 25$	$A^{37} = 84 58 54$	$P^{37} A^{37} = 5,234459$	
$B^{37} = 181 0 55$	$51,7$	$P^{38} = 5 0 1,6$	$P^{38} = 0 27 14,7$	$B^{37} = 90 32 28$	$B^{37} = 90 28 27$	$P^{37} B^{37} = 5,232005$	
$P^{38} = 4 32 46,9$	$45,8$	$S = 179 59 57,3$	$S = 179 59 48,5$	$S = 179 59 59,8$	$S = 180 0 6,8$	$P^{38} A^{37} = 5,322343$	
$S = 360 0 8,8$						$P^{38} B^{37} = 5,320689$	
						$P^{37} P^{38} = 5,579619$	
$P^{38} = 4 10 50,9$	$49,4$	$P^{38} = 2 20 14,5$	$P^{38} = 1 50 36,4$	$P^{38} = 4 10 49,4$	$P^{39} = 4 19 46,6$	$A^{38} B^{38} = 4,203903$	
$A^{38} = 175 14 50$	$45,5$	$B^{38} = 175 14 50$	$B^{38} = 176 15 3$	$A^{38} = 87 56 53$	$A^{38} = 87 17 57$	$P^{38} A^{38} = 5,340851$	
$B^{38} = 176 15 3$	$38,5$	$P^{39} = 2 25 8,0$	$P^{39} = 1 54 40,1$	$B^{38} = 87 52 35$	$B^{38} = 88 22 28$	$P^{38} B^{38} = 5,340871$	
$P^{39} = 4 19 48,1$	$46,6$	$S = 180 0 12,5$	$S = 180 0 19,5$	$S = 180 0 17,4$	$S = 180 0 11,6$	$P^{39} A^{38} = 5,325773$	
$S = 360 0 32,0$						$P^{39} B^{38} = 5,325464$	
						$P^{38} P^{39} = 5,634034$	
Anm. Von dem Winkel $B^{38}$ sind vor der Ausgleichung $20'$ abgezogen worden.							
$P^{39} = 8 33 30,4$	$30,9$	$P^{39} = 173 37 49$	$P^{39} = 172 46 35$	$P^{39} = 8 33 30,9$	$P^{40} = 5 2 2,0$	$A^{39} B^{39} = 4,118185$	
$A^{39} = 173 37 49$	$50,5$	$B^{39} = 173 37 49$	$B^{39} = 172 46 35$	$A^{39} = 84 33 40$	$A^{39} = 89 4 9$	$P^{39} A^{39} = 4,944877$	
$B^{39} = 172 46 35$	$36,6$	$P^{40} = 2 21 45,1$	$P^{40} = 2 40 16,4$	$B^{39} = 86 52 39$	$B^{39} = 85 53 56$	$P^{39} B^{39} = 4,943563$	
$P^{40} = 5 2 1,5$	$2,0$	$S = 180 0 12,5$	$S = 180 0 19,5$	$S = 179 59 49,9$	$S = 180 0 7,0$	$P^{40} A^{39} = 5,173849$	
$S = 359 59 55,9$						$P^{40} B^{39} = 5,174905$	
						$P^{39} P^{40} = 5,374685$	
$P^{40} = 6 27 16,0$	$15,3$	$P^{40} = 1 13 29,1$	$P^{40} = 5 13 46,9$	$P^{40} = 6 27 15,3$	$P^{41} = 3 19 27,1$	$A^{40} B^{40} = 4,126001$	
$A^{40} = 178 8 53$	$50,8$	$B^{40} = 178 8 53$	$B^{40} = 172 4 29$	$A^{40} = 89 41 3$	$A^{40} = 88 27 50$	$P^{40} A^{40} = 5,072704$	
$B^{40} = 172 4 29$	$26,8$	$P^{41} = 0 37 41,4$	$P^{41} = 2 41 46,4$	$B^{40} = 83 51 58$	$B^{40} = 88 12 31$	$P^{40} B^{40} = 5,075192$	
$P^{41} = 3 19 27,8$	$27,1$	$S = 180 0 3,5$	$S = 180 0 2,3$	$S = 180 0 16,3$	$S = 179 59 48,1$	$P^{41} A^{40} = 5 362473$	
$S = 360 0 5,8$						$P^{41} B^{40} = 5,362529$	
						$P^{40} P^{41} = 5,542298$	



Winkel im Viereck		Winkel im Dreieck			Log. der Seiten	
Ver- bessert	A	B	$p^2$	Verb.	$p^{n+1}$	Verb.
$P^{41} = 4^\circ 56' 15,0$ $A^{41} = 174 53 57$ $B^{41} = 175 18 11$ $P^{42} = 4 51 36,2$ $S = 359 59 59,2$	$P^{41} = 2^\circ 34' 15,0$ $A^{41} = 174 53 57$ $P^{42} = 2 31 49,2$ $S = 180 0 1,2$	$P^{41} = 2^\circ 22' 0,0$ $B^{41} = 175 18 11$ $P^{42} = 2 19 47,0$ $S = 179 59 58,0$	$P^{41} = 4^\circ 56' 15,1$ $A^{41} = 87 32 35$ $B^{41} = 87 31 23$ $S = 180 0 13,1$	$P^{42} = 28,5$ $A^{41} = 87 21 22$ $B^{41} = 87 46 48$ $S = 179 59 46,3$	$P^{42} = 4^\circ 51' 36,3$ $A^{41} = 87 21 22$ $B^{41} = 87 46 48$ $S = 179 59 46,3$	$A^{41} B^{41} = 4,150333$ $P^{41} A^{41} = 5,215082$ $P^{41} B^{41} = 5,215088$ $P^{42} A^{41} = 5,222012$ $P^{42} B^{41} = 5,221876$ $P^{41} P^{42} = 5,519156$
$P^{42} = 7 26 14,4$ $A^{42} = 163 13 43$ $B^{42} = 184 22 56$ $P^{43} = 4 57 21,3$ $S = 360 0 14,7$	$P^{42} = 10 4 5,7$ $A^{42} = 163 13 43$ $P^{43} = 6 42 21,0$ $S = 180 0 9,7$	$P^{42} = 2 37 51,3$ $B^{42} = 175 37 4$ $P^{43} = 1 44 59,7$ $S = 179 59 55,0$	$P^{42} = 7 26 12,6$ $A^{42} = 81 12 27$ $B^{42} = 91 21 49$ $S = 180 0 28,6$	$P^{43} = 24,7$ $A^{42} = 82 1 16$ $B^{42} = 93 1 7$ $S = 179 59 42,5$	$P^{43} = 4 57 19,5$ $A^{42} = 82 1 16$ $B^{42} = 93 1 7$ $S = 179 59 42,5$	$A^{42} B^{42} = 4,026006$ $P^{42} A^{42} = 4,913838$ $P^{42} B^{42} = 4,908825$ $P^{43} A^{42} = 5,088986$ $P^{43} B^{42} = 5,085368$ $P^{42} P^{43} = 5,306732$
$P^{43} = 6 7 57,9$ $A^{43} = 175 32 57$ $B^{43} = 172 1 55$ $P^{44} = 6 17 0,9$ $S = 359 59 50,8$	$P^{43} = 2 11 54,5$ $A^{43} = 175 32 57$ $P^{44} = 2 15 14,5$ $S = 180 0 6,0$	$P^{43} = 3 56 3,4$ $B^{43} = 172 1 55$ $P^{44} = 4 1 46,4$ $S = 179 59 44,8$	$P^{43} = 6 7 59,0$ $A^{43} = 87 43 42$ $B^{43} = 86 8 5$ $S = 179 59 46,0$	$P^{44} = 11,5$ $A^{43} = 87 49 15$ $B^{43} = 85 53 50$ $S = 188 0 7,0$	$P^{44} = 6 17 2,0$ $A^{43} = 87 49 15$ $B^{43} = 85 53 50$ $S = 188 0 7,0$	$A^{43} B^{43} = 4,113395$ $P^{43} A^{43} = 5,083683$ $P^{43} B^{43} = 5,084330$ $P^{44} A^{43} = 5,073045$ $P^{44} B^{43} = 5,073845$ $P^{43} P^{44} = 5,379098$
$P^{44} = 9 11 15,3$ $A^{44} = 177 57 59$ $B^{44} = 168 55 29$ $P^{45} = 3 55 32,0$ $S = 360 0 15,2$	$P^{44} = 1 26 1,2$ $A^{44} = 177 57 59$ $P^{45} = 0 36 14,6$ $S = 180 0 14,8$	$P^{44} = 7 45 14,0$ $B^{44} = 168 55 29$ $P^{45} = 3 19 17,4$ $S = 180 0 0,4$	$P^{44} = 9 11 13,3$ $A^{44} = 91 32 56$ $B^{44} = 79 16 2$ $S = 180 0 11,3$	$P^{45} = 2,9$ $A^{44} = 86 25 3$ $B^{44} = 89 39 27$ $S = 180 0 0,1$	$P^{45} = 3 55 30,1$ $A^{44} = 86 25 3$ $B^{44} = 89 39 27$ $S = 180 0 0,1$	$A^{44} B^{44} = 4,204114$ $P^{44} A^{44} = 4,993257$ $P^{44} B^{44} = 5,000766$ $P^{45} A^{44} = 5,368726$ $P^{45} B^{44} = 5,367884$ $P^{44} P^{45} = 5,521340$
$P^{45} = 4 18 29,4$ $A^{45} = 169 59 36$ $B^{45} = 177 41 37$ $P^{46} = 8 0 25,0$ $S = 360 0 7,4$	$P^{45} = 3 30 1,1$ $A^{45} = 169 59 36$ $P^{46} = 6 30 22,2$ $S = 179 59 59,3$	$P^{45} = 0 48 28,3$ $B^{45} = 177 41 37$ $P^{46} = 1 30 2,8$ $S = 180 0 8,1$	$P^{45} = 4 18 28,5$ $A^{45} = 85 31 54$ $B^{45} = 90 9 31$ $S = 179 59 53,5$	$P^{46} = 36,0$ $A^{45} = 84 27 42$ $B^{45} = 87 32 6$ $S = 180 0 12,1$	$P^{46} = 8 0 24,1$ $A^{45} = 84 27 42$ $B^{45} = 87 32 6$ $S = 180 0 12,1$	$A^{45} B^{45} = 4,183438$ $P^{45} A^{45} = 5,307701$ $P^{45} B^{45} = 5,306382$ $P^{46} A^{45} = 5,039120$ $P^{46} B^{45} = 5,037488$ $P^{45} P^{46} = 5,493370$

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Winkel im Viereck		Ver- bessert	Winkel im Dreieck				Log. der Seiten	
			A	B	$P^a$	Verb.	$P^{a+1}$	Verb.
$P^{46} = 4^\circ 26' 58,8$	$1,1$							$A^{46} B^{46} = 4,176855$
$A^{46} = 172 33 21$	28,2		$P^{46} = 2^\circ 30' 55,8$	$P^{46} = 1^\circ 56' 3,0$	$P^{46} = 4^\circ 27' 1,1$		$P^{47} = 8^\circ 42' 33,5$	$P^{46} A^{46} = 5,286854$
$B^{46} = 174 16 50$	57,2		$B^{46} = 174 16 50$	$A^{46} = 87 8 57$			$A^{46} = 85 24 24$	$P^{46} B^{46} = 5,286487$
$P^{47} = 8 42 31,2$	33,5		$P^{47} = 4 55 35,8$	$P^{47} = 3 46 55,4$	$B^{46} = 88 23 52$		$B^{46} = 85 52 58$	$P^{47} A^{46} = 4,995546$
$S = 359 59 41,0$			$S = 179 59 52,6$	$S = 179 59 48,4$	$S = 179 59 50,1$		$S = 179 59 55,5$	$P^{47} B^{46} = 4,996271$
$P^{47} = 9 47 9,4$	9,1							$P^{46} P^{47} = 5,465393$
$A^{47} = 124 39 50$	49,0		$P^{47} = 33 28 16,4$	$P^{47} = 23 41 7,0$	$P^{47} = 9 47 9,1$		$P^{48} = 6 36 56,0$	$A^{47} B^{47} = 4,236756$
$B^{47} = 218 56 7$	5,9		$A^{47} = 124 39 50$	$B^{47} = 141 3 53$	$A^{47} = 60 26 7$		$A^{47} = 64 13 43$	$P^{47} A^{47} = 4,979988$
$P^{48} = 6 36 56,3$	56,0		$P^{48} = 21 51 48,1$	$P^{48} = 15 14 51,8$	$B^{47} = 109 46 37$		$B^{47} = 109 9 30$	$P^{47} B^{47} = 4,915816$
$S = 360 0 2,7$			$S = 179 59 54,5$	$S = 179 59 51,8$	$S = 179 59 53,1$		$S = 180 0 9,0$	$P^{48} A^{47} = 5,150536$
$P^{48} = 7 7 26,3$	26,4							$P^{48} B^{47} = 5,129774$
$A^{48} = 168 37 30$	30,3		$P^{48} = 5 32 54,0$	$P^{48} = 1 34 32,3$	$P^{48} = 7 7 26,4$		$P^{49} = 7 28 41,9$	$P^{47} P^{48} = 5,324100$
$B^{48} = 176 46 21$	21,4		$A^{48} = 168 37 30$	$B^{48} = 176 46 21$	$A^{48} = 83 59 55$		$A^{48} = 84 37 35$	$A^{48} B^{48} = 4,132003$
$P^{49} = 7 28 41,8$	41,9		$P^{49} = 5 49 35,9$	$P^{49} = 1 39 5,9$	$B^{48} = 88 52 44$		$B^{48} = 87 53 37$	$P^{48} A^{48} = 5,038437$
$S = 359 59 59,1$			$S = 179 59 59,9$	$S = 179 59 59,2$	$S = 180 0 5,4$		$S = 179 59 53,9$	$P^{48} B^{48} = 5,036132$
$P^{49} = 3 59 44,1$	44,4							$P^{49} A^{48} = 5,017262$
$A^{49} = 189 30 18$	19,0		$P^{49} = 3 31 43,2$	$P^{49} = 7 31 27,3$	$P^{49} = 3 59 44,4$		$P^{50} = 6 44 14,6$	$P^{49} B^{48} = 5,015643$
$B^{49} = 159 45 41$	42,0		$A^{49} = 170 29 42$	$B^{49} = 159 45 41$	$A^{49} = 95 18 55$		$A^{49} = 94 11 23$	$P^{48} P^{49} = 5,326866$
$P^{50} = 6 44 14,3$	14,6		$P^{50} = 5 58 33,3$	$P^{50} = 12 42 47,6$	$B^{49} = 80 41 3$		$B^{49} = 79 4 38$	$A^{49} B^{49} = 4,198434$
$S = 359 59 57,4$			$S = 179 59 58,5$	$S = 179 59 55,9$	$S = 179 59 42,4$		$S = 180 0 15,6$	$P^{49} A^{49} = 5,349557$
$P^{50} = 4 56 36,4$	34,6							$P^{49} B^{49} = 5,353448$
$A^{50} = 158 29 42$	36,6		$P^{50} = 7 29 1,7$	$P^{50} = 2 32 25,3$	$P^{50} = 4 56 34,6$		$P^{51} = 9 15 37,3$	$P^{50} A^{50} = 5,127906$
$B^{50} = 187 18 17$	11,5		$A^{50} = 158 29 42$	$B^{50} = 172 41 43$	$A^{50} = 79 43 53$		$A^{50} = 78 45 49$	$P^{49} P^{50} = 5,549823$
$P^{51} = 9 15 39,1$	37,3		$P^{51} = 14 1 31,3$	$P^{51} = 4 45 52,2$	$B^{50} = 95 19 47$		$B^{50} = 91 58 30$	$A^{50} B^{50} = 4,016807$
$S = 360 0 14,5$			$S = 180 0 15,0$	$S = 180 0 0,5$	$S = 180 0 14,6$		$S = 179 59 56,3$	$P^{50} A^{50} = 5,079603$
								$P^{50} B^{50} = 5,074468$
								$P^{51} A^{50} = 4,809936$
								$P^{51} B^{50} = 4,801789$
								$P^{50} P^{51} = 5,259416$



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	$P^n$	Verb.	$P^{n+1}$	Verb.	
$P^{51} = 9^{\circ} 29' 44,5$ $A^{51} = 176 30 40$ $B^{51} = 168 58 5$ $P^{52} = 5 1 50,8$ $S = 360 0 20,3$	$P^{51} = 2^{\circ} 17' 17,1$ $A^{51} = 176 30 40$ $P^{52} = 1 12 24,2$ $S = 180 0 21,3$	$P^{51} = 7^{\circ} 12' 27,4$ $B^{51} = 168 58 5$ $P^{52} = 3 49 26,6$ $S = 179 59 59,0$	$P^{51} = 9^{\circ} 29' 42,0$ $A^{51} = 88 6 5$ $B^{51} = 82 24 14$ $S = 180 0 1,0$	$P^{52} = 4,5$ $B^{51} = 13,5$ $S = 180 0 14,3$	$P^{52} = 5^{\circ} 1' 48,3$ $A^{51} = 88 24 35$ $B^{51} = 86 33 51$ $S = 180 0 14,3$	$A^{51} B^{51} = 4,167025$ $P^{51} A^{51} = 4,945814$ $P^{51} B^{51} = 4,949403$ $P^{52} A^{51} = 5,223350$ $P^{52} B^{51} = 5,223963$ $P^{51} P^{52} = 5,407232$	
$P^{52} = 4 45 50,3$ $A^{52} = 173 28 48$ $B^{52} = 176 4 48$ $P^{53} = 5 40 40,9$ $S = 360 0 7,2$	$P^{52} = 2 58 34,8$ $A^{52} = 173 28 48$ $P^{53} = 3 32 44,9$ $S = 180 0 4,7$	$P^{52} = 1 47 15,5$ $B^{52} = 176 4 48$ $P^{53} = 2 7 59,0$ $S = 180 0 2,5$	$P^{52} = 4 45 49,4$ $A^{52} = 87 7 33$ $B^{52} = 88 6 46$ $S = 180 0 8,4$	$P^{53} = 28,8$ $B^{52} = 41,8$ $S = 179 59 57,0$	$P^{53} = 5 40 40,0$ $A^{52} = 86 21 15$ $B^{52} = 87 58 2$ $S = 179 59 57,0$	$A^{52} B^{52} = 4,188011$ $P^{52} A^{52} = 5,268449$ $P^{52} B^{52} = 5,268138$ $P^{53} A^{52} = 5,192390$ $P^{53} B^{52} = 5,191785$ $P^{52} P^{53} = 5,532415$	
$P^{53} = 7 53 52,4$ $A^{53} = 177 53 56$ $B^{53} = 168 38 58$ $P^{54} = 5 33 24,8$ $S = 360 0 11,2$	$P^{53} = 1 14 2,4$ $A^{53} = 177 53 56$ $P^{54} = 0 52 3,8$ $S = 180 0 2,2$	$P^{53} = 6 39 50,0$ $B^{53} = 168 38 58$ $P^{54} = 4 41 21,0$ $S = 180 0 9,0$	$P^{53} = 7 53 51,0$ $A^{53} = 88 18 7$ $B^{53} = 83 47 29$ $S = 179 59 27,0$	$P^{54} = 23,5$ $B^{53} = 45,5$ $S = 180 0 41,4$	$P^{54} = 5 33 23,4$ $A^{53} = 89 35 49$ $B^{53} = 84 51 29$ $S = 180 0 41,4$	$A^{53} B^{53} = 3,500538$ $P^{53} A^{53} = 4,359993$ $P^{53} B^{53} = 4,362354$ $P^{54} A^{53} = 4,512782$ $P^{54} B^{53} = 4,514526$ $P^{53} P^{54} = 4,744031$	
$P^{54} = 4 28 50,3$ $A^{54} = 171 37 14$ $B^{54} = 178 28 17$ $P^{55} = 5 25 21,9$ $S = 359 59 43,2$	$P^{54} = 3 47 24,8$ $A^{54} = 171 37 14$ $P^{55} = 4 35 11,1$ $S = 179 59 49,9$	$P^{54} = 0 41 25,5$ $B^{54} = 178 28 17$ $P^{55} = 0 50 10,8$ $S = 179 59 53,3$	$P^{54} = 4 28 52,4$ $A^{54} = 86 11 51$ $B^{54} = 89 19 18$ $S = 180 0 1,4$	$P^{55} = 50,3$ $B^{54} = 17,3$ $S = 179 59 46,0$	$P^{55} = 5 25 24,0$ $A^{54} = 85 25 23$ $B^{54} = 89 8 59$ $S = 179 59 46,0$	$A^{54} B^{54} = 4,166637$ $P^{54} A^{54} = 5,273777$ $P^{54} B^{54} = 5,272850$ $P^{55} A^{54} = 5,191095$ $P^{55} B^{54} = 5,189756$ $P^{54} P^{55} = 5,534281$	
$P^{55} = 4 30 52,7$ $A^{55} = 175 53 27$ $B^{55} = 174 32 35$ $P^{56} = 5 3 9,8$ $S = 360 0 4,5$	$P^{55} = 1 56 20,5$ $A^{55} = 175 53 27$ $P^{56} = 2 10 18,8$ $S = 180 0 6,3$	$P^{55} = 2 34 32,2$ $B^{55} = 174 32 35$ $P^{56} = 2 52 51,0$ $S = 179 59 58,2$	$P^{55} = 4 30 52,1$ $A^{55} = 88 2 43$ $B^{55} = 87 26 29$ $S = 180 0 4,1$	$P^{56} = 41,0$ $B^{55} = 26,9$ $S = 179 59 59,2$	$P^{56} = 5 3 9,2$ $A^{55} = 87 50 44$ $B^{55} = 87 6 6$ $S = 179 59 59,2$	$A^{55} B^{55} = 4,148954$ $P^{55} A^{55} = 5,252187$ $P^{55} B^{55} = 5,252667$ $P^{56} A^{55} = 5,203572$ $P^{56} B^{55} = 5,203821$ $P^{55} P^{56} = 5,529470$	



Winkel im Viereck		Ver- bessert	Winkel im Dreieck				Log. der Seiten	
			A	B	$p^a$	Verb.	$p^{a+1}$	Verb.
$P^{56} = 11^{\circ} 28' 58,8$	$58,2$							$A^{56} B^{56} = 4,117162$
$A^{56} = 200 29 42$	$40,4$		$P^{56} = 15^{\circ} 3' 39,4$	$P^{56} = 26^{\circ} 32' 38,2$	$P^{56} = 11^{\circ} 28' 58,2$		$P^{57} = 4^{\circ} 11' 11,1$	$P^{56} A^{56} = 4,794944$
$B^{56} = 143 50 12$	$10,3$		$A^{56} = 159 30 18$	$B^{56} = 143 50 12$	$A^{56} = 97 4 46$	$45,5$	$A^{56} = 103 24 56$	$P^{56} B^{56} = 4,814822$
$P^{57} = 4 11 11,7$	$11,1$		$P^{57} = 5 26 6,9$	$P^{57} = 9 37 18,6$	$B^{56} = 71 26 16$	$15,9$	$B^{56} = 72 23 56$	$P^{57} A^{56} = 5,233003$
$S = 360 0 4,5$			$S = 180 0 4,3$	$S = 180 0 8,8$	$S = 180 0 0,2$		$S = 180 0 3,1$	$P^{57} B^{56} = 5,241813$
$P^{57} = 5 22 38,2$	$38,2$							$P^{56} P^{57} = 5,362586$
$A^{57} = 158 6 39$	$39,1$		$P^{57} = 10 54 41,2$	$P^{57} = 5 32 3,0$	$P^{57} = 5 22 38,2$		$P^{58} = 5 24 6,5$	$A^{57} B^{57} = 4,173306$
$B^{57} = 191 6 36$	$36,2$		$A^{57} = 158 6 39$	$B^{57} = 168 53 24$	$A^{57} = 79 34 35$	$31,9$	$A^{57} = 78 32 4$	$P^{57} A^{57} = 5,199817$
$P^{58} = 5 24 6,5$	$6,5$		$P^{58} = 10 58 46,6$	$P^{58} = 5 34 40,1$	$B^{57} = 95 2 53$	$49,9$	$B^{57} = 96 3 43$	$P^{57} B^{57} = 5,194276$
$S = 359 59 59,7$			$S = 180 0 6,8$	$S = 180 0 7,1$	$S = 180 0 6,2$		$S = 179 59 53,5$	$P^{58} A^{57} = 5,197097$
$P^{58} = 6 24 24,8$	$24,2$							$P^{58} B^{57} = 5,190780$
$A^{58} = 157 18 2$	$0,2$		$P^{58} = 14 9 26,1$	$P^{58} = 7 45 1,3$	$P^{58} = 6 24 24,2$		$P^{59} = 3 52 46,4$	$P^{57} P^{58} = 5,491516$
$B^{58} = 192 24 51$	$49,2$		$A^{58} = 157 18 2$	$B^{58} = 167 35 9$	$A^{58} = 77 50 26$	$18,4$	$A^{58} = 79 27 36$	$A^{58} B^{58} = 4,168577$
$P^{59} = 3 52 47,0$	$46,4$		$P^{59} = 8 32 35,9$	$P^{59} = 4 39 48,9$	$B^{58} = 95 45 25$	$17,4$	$B^{58} = 96 39 26$	$P^{58} A^{58} = 5,111114$
$S = 360 0 4,8$			$S = 180 0 4,0$	$S = 179 59 59,2$	$S = 180 0 15,2$		$S = 179 59 48,4$	$P^{59} A^{58} = 5,335313$
$P^{59} = 6 18 34,2$	$32,5$							$P^{59} B^{58} = 5,330864$
$A^{59} = 172 22 39$	$34,1$		$P^{59} = 4 3 54,2$	$P^{59} = 2 14 40,0$	$P^{59} = 6 18 32,5$		$P^{60} = 5 31 27,4$	$P^{58} P^{59} = 5,533377$
$B^{59} = 175 47 31$	$26,1$		$A^{59} = 172 22 39$	$B^{59} = 175 47 31$	$A^{59} = 85 48 17$	$7,8$	$A^{59} = 86 34 22$	$A^{59} B^{59} = 4,175681$
$P^{60} = 5 31 29,1$	$27,4$		$P^{60} = 3 33 37,7$	$P^{60} = 1 57 51,4$	$B^{59} = 87 53 29$	$19,7$	$B^{59} = 87 54 2$	$P^{59} A^{59} = 5,133553$
$S = 360 0 13,3$			$S = 180 0 10,9$	$S = 180 0 2,4$	$S = 180 0 18,5$		$S = 179 59 51,4$	$P^{60} A^{59} = 5,191911$
$P^{60} = 4 56 13,8$	$12,8$							$P^{60} B^{59} = 5,191425$
$A^{60} = 174 33 42$	$39,1$		$P^{60} = 2 31 43,5$	$P^{60} = 2 24 30,3$	$P^{60} = 4 56 12,8$		$P^{61} = 5 41 4,0$	$P^{59} P^{60} = 5,464187$
$B^{60} = 174 49 7$	$4,1$		$A^{60} = 174 33 42$	$B^{60} = 174 49 7$	$A^{60} = 87 22 56$	$55,1$	$A^{60} = 87 10 46$	$A^{60} B^{60} = 4,160972$
$P^{61} = 5 41 5,0$	$4,0$		$P^{61} = 2 54 41,9$	$P^{61} = 2 46 23,1$	$B^{60} = 87 40 53$	$52,1$	$B^{60} = 87 8 14$	$P^{60} A^{60} = 5,225822$
$S = 360 0 7,8$			$S = 180 0 7,4$	$S = 180 0 0,4$	$S = 180 0 1,8$		$S = 180 0 4,0$	$P^{60} B^{60} = 5,225725$
								$P^{61} A^{60} = 5,164576$
								$P^{61} B^{60} = 5,164592$
								$P^{60} P^{61} = 5,496822$



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Ver- bessert	A	B	$P^n$	Verb.	$P^{n+1}$	Verb.	
$P^{61} = 6^\circ 31' 9,8$ $A^{61} = 166 23 4$ $B^{61} = 181 3 26$ $P^{62} = 6 2 20,8$ $S = 360 0 0,6$	$P^{61} = 7^\circ 4' 3,5$ $A^{61} = 166 23 4$ $P^{62} = 6 32 52,4$ $S = 179 59 59,9$	$P^{61} = 0^\circ 32' 53,7$ $B^{61} = 178 56 34$ $P^{62} = 0 30 31,6$ $S = 179 59 59,3$	$P^{61} = 6^\circ 31' 9,7$ $A^{61} = 82 46 15$ $B^{61} = 90 42 44$ $S = 180 0 8,7$	$10,7$ $39,6$	$P^{62} = 6^\circ 2' 20,7$ $A^{61} = 83 36 49$ $B^{61} = 90 20 42$ $S = 179 59 51,7$	$53,1$ $46,2$	$A^{61} B^{61} = 4,103978$ $P^{61} A^{61} = 5,048800$ $P^{61} B^{61} = 5,045366$ $P^{62} A^{61} = 5,081926$ $P^{62} B^{61} = 5,079232$ $P^{61} P^{62} = 5,363610$
$P^{62} = 3 52 58,2$ $A^{62} = 192 28 37$ $B^{62} = 157 18 16$ $P^{63} = 6 20 9,8$ $S = 360 0 1,0$	$P^{62} = 4 42 20,6$ $A^{62} = 167 31 23$ $P^{63} = 7 46 15,9$ $S = 179 59 59,5$	$P^{62} = 8 35 18,8$ $B^{62} = 157 18 16$ $P^{63} = 14 6 25,7$ $S = 180 0 0,5$	$P^{62} = 3 52 58,1$ $A^{62} = 95 32 19$ $B^{62} = 80 14 36$ $S = 179 59 53,1$	$22,4$ $39,5$	$P^{63} = 6 20 9,7$ $A^{62} = 96 36 18$ $B^{62} = 77 3 40$ $S = 180 0 7,7$	$14,2$ $36,1$	$A^{62} B^{62} = 3,993022$ $P^{62} A^{62} = 5,156009$ $P^{62} B^{62} = 5,160050$ $P^{63} A^{62} = 4,939044$ $P^{63} B^{62} = 4,947323$ $P^{62} P^{63} = 5,359542$
$P^{63} = 3 53 41,4$ $A^{63} = 185 14 6$ $B^{63} = 164 1 53$ $P^{64} = 6 50 24,4$ $S = 360 0 4,8$	$P^{63} = 1 52 58 3$ $A^{63} = 174 45 54$ $P^{64} = 3 21 0,6$ $S = 179 59 52,9$	$P^{63} = 5 46 39,7$ $B^{63} = 164 1 53$ $P^{64} = 10 11 25,0$ $S = 179 59 57,7$	$P^{63} = 3 53 40,8$ $A^{63} = 91 1 23$ $B^{63} = 85 4 58$ $S = 180 0 1,8$	$22,1$ $57,1$	$P^{64} = 6 50 23,8$ $A^{63} = 94 12 43$ $B^{63} = 78 56 55$ $S = 180 0 1,8$	$42,1$ $54,1$	$A^{63} B^{63} = 4,191735$ $P^{63} A^{63} = 5,358117$ $P^{63} B^{63} = 5,359650$ $P^{64} A^{63} = 5,107707$ $P^{64} B^{63} = 5,114662$ $P^{63} P^{64} = 5,551328$
$P^{64} = 3 38 15,6$ $A^{64} = 172 30 54$ $B^{64} = 180 2 50$ $P^{65} = 3 47 59,5$ $S = 359 59 59,1$	$P^{64} = 3 39 38,8$ $A^{64} = 172 30 54$ $P^{65} = 3 49 23,7$ $S = 179 59 56,5$	$P^{64} = 0 1 23,2$ $B^{64} = 179 57 10$ $P^{65} = 0 1 24,2$ $S = 179 59 57,4$	$P^{64} = 3 38 15,7$ $A^{64} = 86 13 3$ $B^{64} = 90 8 31$ $S = 179 59 49,7$	$8,1$ $36,2$	$P^{65} = 3 47 59,6$ $A^{64} = 86 17 51$ $B^{64} = 89 54 19$ $S = 180 0 9,6$	$46,2$ $14,2$	$A^{64} B^{64} = 4,165025$ $P^{64} A^{64} = 5,362613$ $P^{64} B^{64} = 5,361668$ $P^{65} A^{64} = 5,343693$ $P^{65} B^{64} = 5,342786$ $P^{64} P^{65} = 5,653358$
$P^{65} = 6 6 17,8$ $A^{65} = 173 15 46$ $B^{65} = 174 36 13$ $P^{66} = 6 1 56,3$ $S = 360 0 13,1$	$P^{65} = 3 23 24,9$ $A^{65} = 173 15 46$ $P^{66} = 3 20 54,3$ $S = 180 0 5,2$	$P^{65} = 2 42 52,9$ $B^{65} = 174 36 13$ $P^{66} = 2 41 2,0$ $S = 180 0 7,9$	$P^{65} = 6 6 16,2$ $A^{65} = 86 36 22$ $B^{65} = 87 17 23$ $S = 180 0 1,2$	$21,4$ $22,4$	$P^{66} = 6 1 54,7$ $A^{65} = 86 39 24$ $B^{65} = 87 18 50$ $S = 180 0 8,7$	$19,7$ $45 6$	$A^{65} B^{65} = 4,095678$ $P^{65} A^{65} = 5,068487$ $P^{65} B^{65} = 5,068211$ $P^{66} A^{65} = 5,073674$ $P^{66} B^{65} = 5,073410$ $P^{65} P^{66} = 5,371369$



Winkel im Viereck	Verbessert	Winkel im Dreieck				Log. der Seiten	
		A	B	$p^a$	Verb.	$p^{n+1}$	Verb.
$P^{66} = 7^\circ 31' 26,0$	26,5	$P^{66} = 8^\circ 14' 38,5$	$P^{66} = 0^\circ 43' 12,5$	$P^{66} = 7^\circ 31' 26,5$	$P^{67} = 7^\circ 54' 50,7$	$A^{66} B^{66} = 3,794251$	
$A^{66} = 163 15 58$	59,4	$A^{66} = 163 15 58$	$B^{66} = 178 42 18$	$A^{66} = 81 14 38$	$A^{66} = 43,2$	$P^{66} A^{66} = 4,677072$	
$B^{66} = 181 17 42$	43,4	$P^{67} = 8 29 15,0$	$P^{67} = 0 34 24,8$	$B^{66} = 91 13 45$	$B^{66} = 50,3$	$P^{66} B^{66} = 4,672082$	
$P^{67} = 7 54 50,2$	50,7	$S = 479 59 51,5$	$S = 179 59 55,3$	$S = 179 59 49,5$	$S = 180 0 7,7$	$P^{67} A^{66} = 4,655355$	
$S = 359 59 56,2$						$P^{67} B^{66} = 4,654130$	
						$P^{66} P^{67} = 4,962731$	
$P^{67} = 2 26 15,8$	17,5	$P^{67} = 23 20 44,6$	$P^{67} = 20 54 28,8$	$P^{67} = 2 26 15,8$	$P^{68} = (6 21)$	$A^{67} B^{67} = 4,165413$	
$A^{67} = 119 36 47$	52,7	$A^{67} = 119 36 47$	$B^{67} = 128 25 4$	$A^{67} = 33 12 5$	$A^{67} = 10,7$	$P^{67} A^{67} = 5,302053$	
$B^{67} = 231 34 54$	59,8	$P^{68} =$	$P^{68} =$	$B^{67} = 144 21 26$	$B^{67} = 31,8$	$P^{67} B^{67} = 5,275038$	
$P^{68} = (6 21)$	50,0			$S = 179 59 46,8$		$P^{68} A^{67} = 5,120195$	
						$P^{68} B^{67} = 5,119854$	
						$P^{67} P^{68} = 5,461400$	
$P^{68} = 3 57 1,3$	2,2	$P^{68} = 1 10 27,5$	$P^{68} = 2 46 33,8$	$P^{68} = 3 57 1,3$	$P^{69} = (40 30)$	$A^{68} B^{68} = 4,199407$	
$A^{68} = 166 18 4$	6,9	$A^{68} = 166 18 4$	$B^{68} = 149 14 42$	$A^{68} = 89 28 46$	$A^{68} = 48,9$	$P^{68} A^{68} = 5,360434$	
$B^{68} = 149 14 42$	44,9	$P^{69} =$	$P^{69} =$	$B^{68} = 86 34 6$	$B^{68} = 8,9$	$P^{68} B^{68} = 5,361195$	
$P^{69} = (40 30)$	6,0			$S = 179 59 53,3$		$P^{69} A^{68} = 4,335471$	
						$P^{69} B^{68} = 4 375256$	
						$P^{68} P^{69} = 5,398639$	
$P^{69} = 4 1 6,8$	7,2	$P^{69} = 4 39 52,1$	$P^{69} = 0 38 45,3$	$P^{69} = 4 1 7,2$	$P^{70} = 9 10 44,4$	$A^{69} B^{69} = 4,247310$	
$A^{69} = 164 43 37$	38,2	$A^{69} = 164 43 37$	$B^{69} = 177 55 31$	$A^{69} = 77 2 32$	$A^{69} = 26,9$	$P^{69} A^{69} = 5,369398$	
$B^{69} = 182 4 29$	30,2	$P^{70} = 10 36 32,5$	$P^{70} = 1 25 48,5$	$B^{69} = 98 56 31$	$B^{69} = 25,9$	$P^{69} B^{69} = 5,390502$	
$P^{70} = 9 10 44,0$	44,4	$S = 180 0 1,6$	$S = 180 0 4,8$	$S = 180 0 10,2$	$S = 179 59 47,4$	$P^{70} A^{69} = 5,041372$	
$S = 359 59 56,8$						$P^{70} B^{69} = 5,044443$	
						$P^{69} P^{70} = 5,551944$	
$P^{70} = 8 56 19,8$	21,5	$P^{70} = 164 38 25$	$P^{70} = 177 1 36$	$P^{70} = 8 56 21,5$	$P^{71} = 3 26 39,3$	$A^{70} B^{70} = 4,175946$	
$A^{70} = 164 38 25$	30,1	$A^{70} = 164 38 25$	$B^{70} = 177 1 36$	$A^{70} = 79 29 30$	$A^{70} = 31,7$	$P^{70} A^{70} = 4,984366$	
$B^{70} = 182 58 24$	29,1	$P^{71} = 4 15 54,2$	$P^{71} = 0 49 16,6$	$B^{70} = 91 34 5$	$B^{70} = 6,8$	$P^{70} B^{70} = 4,977183$	
$P^{71} = 3 26 37,6$	39,3	$S = 359 59 46,4$	$S = 179 59 56,5$	$S = 179 59 56,5$	$S = 180 59 53,3$	$P^{71} A^{70} = 5,397104$	
$S = 359 59 46,4$						$P^{71} B^{70} = 5,395676$	
						$P^{70} P^{71} = 5,535914$	



Winkel im Viereck	Verbessert	Winkel im Dreieck			Verb.	Log. der Seiten
		A	B	$p^2$		
$P^{71} = 6^\circ 57' 37,1$	36,8					$A^{71} B^{71} = 4,037605$
$A^{71} = 171 34 31$	30,0	$P^{71} = 4^\circ 12' 21,2$	$P^{71} = 2^\circ 45' 15,9$	$P^{71} = 6^\circ 57' 36,8$	$P^{72} = 6^\circ 58' 52,2$	$P^{71} A^{71} = 4,973809$
$B^{71} = 174 29 2$	1,0	$A^{71} = 171 34 31$	$B^{71} = 174 29 2$	$A^{71} = 85 22 55$	$A^{71} = 86 11 36$	$P^{71} B^{71} = 4,972762$
$P^{72} = 6 58 52,5$	52,2	$P^{72} = 4 13 16,8$	$P^{72} = 2 45 35,7$	$B^{71} = 87 39 22$	$B^{71} = 86 49 40$	$P^{72} A^{71} = 4,972209$
$S = 360 0 2,6$		$S = 180 0 9,0$	$S = 179 59 53,6$	$S = 179 59 53,8$	$S = 180 0 8,2$	$P^{72} B^{71} = 4,971916$
$P^{72} = 6 38 52,7$	52,7					$P^{71} P^{72} = 5,272865$
$A^{72} = 165 36 6$	6,0	$P^{72} = 8 20 7,1$	$P^{72} = 1 41 14,4$	$P^{72} = 6 38 52,7$	$P^{73} = 4 50 25,4$	$A^{72} B^{72} = 4,290654$
$B^{72} = 182 54 36$	35,9	$A^{72} = 165 36 6$	$B^{72} = 177 5 24$	$A^{72} = 81 34 24$	$A^{72} = 84 1 42$	$P^{72} A^{72} = 5,226854$
$P^{73} = 4 50 25,4$	25,4	$P^{73} = 6 3 48,3$	$P^{73} = 1 13 22,9$	$B^{72} = 91 47 4$	$B^{72} = 91 7 32$	$P^{72} B^{72} = 5,223347$
$S = 360 0 0,1$		$S = 180 0 1,4$	$S = 180 0 1,3$	$S = 180 0 20,7$	$S = 179 59 39,4$	$P^{73} A^{72} = 5,364432$
$P^{73} = 4 0 20,5$	19,4					$P^{73} B^{72} = 5,362055$
$A^{73} = 179 14 45$	44,8	$P^{73} = 0 23 31,7$	$P^{73} = 3 36 48,8$	$P^{73} = 4 0 19,4$	$P^{74} = 3 43 2,0$	$P^{72} P^{73} = 5,598687$
$B^{73} = 173 2 0$	56,8	$A^{73} = 179 14 45$	$B^{73} = 173 2 0$	$A^{73} = 89 35 23$	$A^{73} = 89 39 22$	$A^{73} B^{73} = 4,234975$
$P^{74} = 3 43 3,1$	2,0	$P^{74} = 0 21 44,2$	$P^{74} = 3 21 18,9$	$B^{73} = 86 24 17$	$B^{73} = 86 37 43$	$P^{73} A^{73} = 5,390799$
$S = 360 0 8,6$		$S = 180 0 0,9$	$S = 180 0 7,7$	$S = 179 59 59,4$	$S = 180 0 7,0$	$P^{74} A^{73} = 5,422435$
$P^{74} = 8 35 36,2$	35,5					$P^{74} B^{73} = 5,423177$
$A^{74} = 173 3 13$	11,0	$P^{74} = 5 1 1,2$	$P^{74} = 3 34 35,0$	$P^{74} = 8 35 35,5$	$P^{75} = 3 17 37,4$	$P^{73} P^{74} = 5,707519$
$B^{74} = 175 3 38$	36,1	$A^{74} = 173 3 13$	$B^{74} = 175 3 38$	$A^{74} = 83 19 21$	$A^{74} = 89 43 52$	$A^{74} B^{74} = 4,200643$
$P^{75} = 3 17 38,1$	37,4	$P^{75} = 1 55 39,5$	$P^{75} = 1 21 58,6$	$B^{74} = 88 5 2$	$B^{74} = 86 58 36$	$P^{74} A^{74} = 5,025997$
$S = 360 0 5,3$		$S = 179 59 53,7$	$S = 180 0 11,6$	$S = 179 59 58,5$	$S = 180 0 5,4$	$P^{74} B^{74} = 5,023284$
$P^{75} = (5 22)$	49,7					$P^{75} A^{74} = 5,440713$
$A^{75} = 174 55 48$	48,0	$P^{75} = 2 41 17,6$	$P^{75} = (5 22)$	$P^{75} = 49,7$	$P^{76} = 4 44 53,3$	$P^{75} B^{74} = 5,441313$
$B^{75} = 174 56 29$	29,0	$B^{75} = 174 56 29$	$A^{75} = 86 59 35$	$A^{75} = 87 56 13$	$A^{75} = 87 18 48$	$P^{74} P^{75} = 5,581476$
$P^{76} = 4 44 53,3$	53,3	$P^{76} = 2 22 38,2$	$P^{76} = 2 22 15,1$	$B^{75} = 87 37 41$	$S = 179 59 54,3$	$A^{75} B^{75} = 3,953484$
		$S = 180 0 1,7$				$P^{75} A^{75} = 4,981050$
						$P^{75} B^{75} = 4,980823$
						$P^{76} A^{75} = 5,035103$
						$P^{75} B^{75} = 5,035299$
						$P^{75} P^{76} = 5,309526$

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Winkel im Viereck	Verbessert	Winkel im Dreieck			Verb.	Log. der Seiten
		A	B	$p^n$		
$P^{76} = (4^\circ 33')$	31,8	$P^{76} = 4^\circ 40' 24,3''$	$P^{76} = (4^\circ 53')$	$P^{77} = 5^\circ 24' 8,0''$	$A^{76} B^{76} = 4,216781$	
$A^{76} = 179^\circ 32' 25,5''$	22,5	$B^{76} = 170 10 1$	$A^{76} = 90 44 36''$	$A^{76} = 88 47 49$	$P^{76} A^{76} = 5,283833$	
$B^{76} = 170 10 1$	58,5	$P^{77} = 0 14 28,8$	$B^{76} = 84 21 45$	$B^{76} = 85 48 16$	$P^{76} B^{76} = 5,285901$	
$P^{77} = 5 24 8,0$	7,2	$S = 180 0 4,5$		$S = 180 0 13,0$	$P^{77} A^{76} = 5,241825$	
					$P^{77} B^{76} = 5,242895$	
					$P^{76} P^{77} = 5,564363$	
$P^{77} = 5 57 8,3$	8,0	$P^{77} = 0 1 2,5$	$P^{77} = 5 57 8,0$		$A^{77} B^{77} = 4,124745$	
$A^{77} = 179 58 4$	3,1	$B^{77} = 168 42 50$	$A^{77} = 89 46 29$	$P^{78} = 5 21 59,8$	$P^{77} A^{77} = 5,106799$	
$B^{77} = 168 42 50$	49,1	$P^{78} = 0 0 53,5$	$B^{77} = 84 16 23$	$A^{77} = 90 11 35$	$P^{77} B^{77} = 5,108969$	
$P^{78} = 5 22 0,1$	59,8	$S = 180 0 0,0$		$B^{77} = 84 26 27$	$P^{78} A^{77} = 5,151757$	
$S = 360 0 2,4$			$S = 180 0 0,0$	$S = 180 0 1,8$	$P^{78} B^{77} = 5,153803$	
					$P^{77} P^{78} = 5,430888$	
$P^{78} = 6 4 39,3$	38,5	$P^{78} = 0 50 44,1$	$P^{78} = 6 4 38,5$		$A^{78} B^{78} = 4,060411$	
$A^{78} = 178 30 10$	7,7	$B^{78} = 170 45 20$	$A^{78} = 88 39 15$	$P^{79} = 4 39 56,1$	$P^{78} A^{78} = 5,034450$	
$B^{78} = 170 45 20$	17,7	$P^{79} = 0 38 57,5$	$B^{78} = 85 16 19$	$A^{78} = 89 50 55$	$P^{78} B^{78} = 5,035512$	
$P^{79} = 4 39 56,9$	56,1	$S = 179 59 51,6$		$B^{78} = 85 29 1$	$P^{79} A^{78} = 5,148755$	
$S = 360 0 6,2$			$S = 180 0 14,6$	$S = 179 59 52,1$	$P^{79} B^{78} = 5,150104$	
					$P^{78} P^{79} = 5,396218$	
$P^{79} = 4 35 56,6$	54,8	$P^{79} = 5 49 6,9$	$P^{79} = 4 35 54,8$		$A^{79} B^{79} = 4,153690$	
$A^{79} = 166 1 5$	59,7	$B^{79} = 177 3 47$	$A^{79} = 83 36 19$	$P^{80} = 6 26 57,7$	$P^{79} A^{79} = 5,249448$	
$B^{79} = 182 56 13$	7,8	$P^{80} = 8 9 50,1$	$B^{79} = 91 47 41$	$A^{79} = 82 24 46$	$P^{79} B^{79} = 5,246948$	
$P^{80} = 6 29 59,5$	57,7	$S = 180 0 2,0$		$B^{79} = 91 8 32$	$P^{80} A^{79} = 5,103127$	
$S = 360 0 14,1$			$S = 179 59 47,9$	$S = 180 0 15,7$	$P^{80} B^{79} = 5,099392$	
					$P^{79} P^{80} = 5,480299$	
$P^{80} = 5 36 40,6$	39,6	$P^{80} = 2 20 24,2$	$P^{80} = 5 36 39,6$		$A^{80} B^{80} = 4,104104$	
$A^{80} = 175 1 5$	2,3	$B^{80} = 173 2 18$	$A^{80} = 87 52 48$	$P^{81} = 6 20 2,8$	$P^{80} A^{80} = 5,113071$	
$B^{80} = 173 2 18$	15,3	$P^{81} = 2 38 28,4$	$B^{80} = 86 30 4$	$A^{80} = 87 8 17$	$P^{80} B^{80} = 5,113584$	
$P^{81} = 6 20 3,8$	2,8	$S = 179 59 57,6$		$B^{80} = 86 32 14$	$P^{81} A^{80} = 5,060631$	
$S = 360 0 7,4$			$S = 180 0 9,8$	$S = 180 0 33,8$	$P^{81} B^{80} = 5,060882$	
					$P^{80} P^{81} = 5,388260$	



Winkel im Viereck		Winkel im Dreieck		Log. der Seiten	
Verbessert	A	B	$p^n$	Verb.	$p^{n+1}$
$P^{81} = 5^\circ 51' 36,9$	$P^{81} = 3^\circ 20' 12,8$	$P^{81} = 2^\circ 31' 24,1$	$P^{81} = 5^\circ 51' 35,8$	$P^{82} = 5^\circ 59' 1,0$	$A^{81} B^{81} = 4,133813$
$A^{81} = 173 15 6$	$A^{81} = 173 15 6$	$B^{81} = 174 54 24$	$A^{81} = 86 15 16$	$A^{81} = 86 59 50$	$P^{81} A^{81} = 5,124507$
$B^{81} = 174 54 24$	$P^{82} = 3 24 34,0$	$P^{82} = 2 34 28,1$	$B^{81} = 87 53 24$	$B^{81} = 87 1 0$	$P^{81} B^{81} = 5,123873$
$P^{82} = 5 59 2,1$	$S = 179 59 52,8$	$S = 180 0 16,2$	$S = 180 0 15,8$	$S = 179 59 51,0$	$P^{82} A^{81} = 5,115176$
$S = 360 0 9,0$					$P^{82} B^{81} = 5,115168$
					$P^{81} P^{82} = 5,420143$
$P^{82} = 5 13 49,5$	$P^{82} = 1 46 44,1$	$P^{82} = 3 27 8,4$	$P^{82} = 5 13 47,7$	$P^{83} = 4 57 59,7$	$A^{82} B^{82} = 3,998582$
$A^{82} = 176 32 3$	$A^{82} = 176 32 3$	$B^{82} = 173 16 20$	$A^{82} = 88 8 57$	$A^{82} = 88 23 6$	$P^{82} A^{82} = 5,038058$
$B^{82} = 173 16 20$	$P^{83} = 1 41 20,8$	$P^{83} = 3 16 40,7$	$B^{82} = 86 37 29$	$B^{82} = 86 38 51$	$P^{82} B^{82} = 5,038586$
$P^{83} = 4 58 4,5$	$S = 180 0 4,9$	$S = 180 0 9,1$	$S = 180 0 13,7$	$S = 179 59 56,7$	$P^{83} A^{82} = 5,060447$
$S = 360 0 14,0$					$P^{83} B^{82} = 5,061019$
					$P^{82} P^{83} = 5,350226$
$P^{83} = 7 42 47,3$	$P^{83} = 3 48 45,5$	$P^{83} = 3 54 1,8$	$P^{83} = 7 42 45,6$	$P^{84} = 7 41 2,4$	$A^{83} B^{83} = 4,245449$
$A^{83} = 172 23 42$	$A^{83} = 172 23 42$	$B^{83} = 172 12 39$	$A^{83} = 86 32 15$	$A^{83} = 85 51 27$	$P^{83} A^{83} = 5,116481$
$B^{83} = 172 12 39$	$P^{84} = 3 47 44,2$	$P^{84} = 3 53 19,8$	$B^{83} = 85 44 50$	$B^{83} = 86 27 49$	$P^{83} B^{83} = 5,116885$
$P^{84} = 7 41 4,0$	$S = 180 0 11,7$	$S = 180 0 0,6$	$S = 179 59 50,6$	$S = 180 0 18,4$	$P^{84} A^{83} = 5,118458$
$S = 360 0 12,3$					$P^{84} B^{83} = 5,118150$
					$P^{83} P^{84} = 5,417540$
$P^{84} = 7 7 28,9$	$P^{84} = 5 3 38,4$	$P^{84} = 2 3 50,5$	$P^{84} = 7 7 27,2$	$P^{85} = 7 0 30,4$	$A^{84} B^{84} = 4,188566$
$A^{84} = 169 58 0$	$A^{84} = 169 58 0$	$B^{84} = 175 54 12$	$A^{84} = 85 43 4$	$A^{84} = 84 14 56$	$P^{84} A^{84} = 5,094535$
$B^{84} = 175 54 12$	$P^{85} = 4 58 27,3$	$P^{85} = 2 2 4,8$	$B^{84} = 87 9 18$	$B^{84} = 88 44 54$	$P^{84} B^{84} = 5,093857$
$P^{85} = 7 0 32,1$	$S = 180 0 5,7$	$S = 180 0 7,3$	$S = 179 59 49,2$	$S = 180 0 20,4$	$P^{85} A^{84} = 5,102046$
$S = 360 0 13,0$					$P^{85} B^{84} = 5,099956$
					$P^{84} P^{85} = 5,397670$
$P^{85} = 8 29 31,7$	$P^{85} = 5 26 24,2$	$P^{85} = 3 3 7,5$	$P^{85} = 8 29 30,9$	$P^{86} = 8 47 8,0$	$A^{85} B^{85} = 4,242238$
$A^{85} = 168 56 19$	$A^{85} = 168 56 19$	$B^{85} = 173 47 7$	$A^{85} = 84 51 1$	$A^{85} = 84 5 18$	$P^{85} A^{85} = 5,072207$
$B^{85} = 173 47 7$	$P^{86} = 5 37 22,8$	$P^{86} = 3 9 46,0$	$B^{85} = 86 39 54$	$B^{85} = 87 7 13$	$P^{85} B^{85} = 5,071186$
$P^{86} = 8 47 8,8$	$S = 180 0 6,0$	$S = 180 0 0,5$	$S = 180 0 25,9$	$S = 179 59 39,0$	$P^{86} A^{85} = 5,057745$
$S = 360 0 6,5$					$P^{86} B^{85} = 5,055980$
					$P^{85} P^{86} = 5,364044$

\*  $B^{85}$



Winkel im Viereck		Ver- bessert	Winkel im Dreieck			Log. der Seiten	
			A	B	$p_n$	Verb.	$p_{n+1}$
$P^{86} = 5^\circ 53' 31,5$	30,3	$P^{86} = 8^\circ 43' 49,6$	$P^{86} = 2^\circ 50' 18,1$	$P^{86} = 5^\circ 53' 30,3$	$P^{87} = 5^\circ 53' 24,7$	$A^{86} B^{86} = 4,243948$	
$A^{86} = 162 32 20$	16,5	$A^{86} = 162 32 20$	$B^{86} = 174 19 8$	$A^{86} = 81 39 16$	$A^{86} = 80 53 4$	$P^{86} A^{86} = 5,232194$	
$B^{86} = 185 40 52$	48,5	$P^{87} = 8 43 51,4$	$P^{87} = 2 50 25,5$	$B^{86} = 92 27 12$	$B^{86} = 93 13 40$	$P^{86} B^{86} = 5,227970$	
$P^{87} = 5 53 25,9$	24,7	$S = 180 0 1,0$	$S = 179 59 51,6$	$S = 179 59 58,3$	$S = 180 0 8,7$	$P^{87} A^{86} = 5,232017$	
$S = 360 0 9,4$						$P^{87} B^{86} = 5,227185$	
						$P^{86} P^{87} = 5,528074$	
$P^{87} = 5 35 21,3$	22,1	$P^{87} = 2 59 55,1$	$P^{87} = 2 35 26,2$	$P^{87} = 5 35 22,1$	$P^{88} = 6 3 57,1$	$A^{87} B^{87} = 4,183322$	
$A^{87} = 173 44 47$	49,4	$A^{87} = 173 44 47$	$B^{87} = 174 35 49$	$A^{87} = 86 49 37$	$A^{87} = 86 55 10$	$P^{87} A^{87} = 5,194375$	
$B^{87} = 174 35 49$	51,4	$P^{88} = 3 15 17,1$	$P^{88} = 2 48 39,2$	$B^{87} = 87 34 56$	$B^{87} = 87 0 53$	$P^{87} B^{87} = 5,191095$	
$P^{88} = 6 3 56,3$	57,1	$S = 179 59 59,2$	$S = 179 59 53,4$	$S = 179 59 55,1$	$S = 180 0 0,1$	$P^{88} A^{87} = 5,158772$	
$S = 359 59 53,6$						$P^{88} B^{87} = 5,158734$	
						$P^{87} P^{88} = 5,477323$	
$P^{88} = 7 39 5,2$	4,9	$P^{88} = 13 18 44,0$	$P^{88} = 5 39 38,8$	$P^{88} = 7 39 4,9$	$P^{89} = 5 51 2,0$	$A^{88} B^{88} = 4,215633$	
$A^{88} = 156 27 52$	51,0	$A^{88} = 156 27 52$	$B^{88} = 169 57 57$	$A^{88} = 79 24 29$	$A^{88} = 77 3 23$	$P^{88} A^{88} = 5,090735$	
$B^{88} = 190 2 3$	2,1	$P^{89} = 10 13 15,8$	$P^{89} = 4 22 13,5$	$B^{88} = 92 56 35$	$B^{88} = 97 5 28$	$P^{88} B^{88} = 5,083843$	
$P^{89} = 5 51 2,3$	2,0	$S = 179 59 51,8$	$S = 179 59 49,3$	$S = 180 0 8,9$	$S = 179 59 53,0$	$P^{89} A^{88} = 5,203979$	
$S = 360 0 2,5$						$P^{89} B^{88} = 5,196138$	
						$P^{88} P^{89} = 5,443002$	
$P^{89} = 5 32 42,2$	42,8	$P^{89} = 5 43 22,5$	$P^{89} = 0 10 40,3$	$P^{89} = 5 32 42,8$	$P^{90} = 5 16 48,9$	$A^{89} B^{89} = 4,110910$	
$A^{89} = 168 49 50$	51,7	$A^{89} = 168 49 50$	$B^{89} = 179 39 25$	$A^{89} = 81 5 40$	$A^{89} = 87 44 10$	$P^{89} A^{89} = 5,125045$	
$B^{89} = 180 20 35$	36,6	$P^{90} = 5 26 53,4$	$P^{90} = 0 10 5,1$	$B^{89} = 93 21 49$	$B^{89} = 86 58 46$	$P^{89} B^{89} = 5,120524$	
$P^{90} = 5 16 48,3$	48,9	$S = 180 0 5,9$	$S = 180 0 10,4$	$S = 180 0 11,8$	$S = 179 59 44,9$	$P^{90} A^{89} = 5,146390$	
$S = 359 59 55,5$						$P^{90} B^{89} = 5,146655$	
						$P^{89} P^{90} = 5,44813$	
$P^{90} = 6 27 57,1$	57,6	$P^{90} = 3 9 3,6$	$P^{90} = 3 18 53,5$	$P^{90} = 6 27 57,6$	$P^{91} = 6 37 10,5$	$A^{90} B^{90} = 3,904499$	
$A^{90} = 173 37 28$	29,5	$A^{90} = 173 37 28$	$B^{90} = 173 17 21$	$A^{90} = 86 49 30$	$A^{90} = 86 47 58$	$P^{90} A^{90} = 4,852191$	
$B^{90} = 173 17 21$	22,4	$P^{91} = 3 13 27,5$	$P^{91} = 3 23 42,5$	$B^{90} = 86 42 34$	$B^{90} = 86 34 47$	$P^{90} B^{90} = 4,852241$	
$P^{91} = 6 37 10,0$	10,5	$S = 179 59 59,1$	$S = 179 59 57,0$	$S = 180 0 1,6$	$S = 179 59 55,5$	$P^{91} A^{90} = 4,841984$	
$S = 359 59 56,1$						$P^{91} B^{90} = 4,842080$	
						$P^{90} P^{91} = 5,147477$	



Winkel im Viereck		Winkel im Dreieck			Log. der Seiten	
Verbessert	A	B	$P^n$	Verb.	$P^{n+1}$	Verb.
$P^{91} = 7^\circ 24' 20,9$ $A^{91} = 180 55 13$ $B^{91} = 164 23 1$ $P^{92} = 7 17 15,6$ $S = 359 59 50,5$	$P^{91} = 0^\circ 27' 50,3$ $A^{91} = 179 4 47$ $P^{92} = 0 27 21,3$ $S = 179 59 58,6$	$P^{91} = 7^\circ 52' 11,2$ $B^{91} = 164 23 1$ $P^{92} = 7 44 36,9$ $S = 179 59 49,1$	$P^{91} = 7^\circ 24' 22,1$ $A^{91} = 91 3 27$ $B^{91} = 81 31 58$ $S = 179 59 47,1$	$P^{92} = 7^\circ 17' 16,8$ $A^{91} = 89 51 46$ $B^{91} = 82 51 3$ $S = 180 0 5,8$	$P^{92} = 4,133357$ $P^{91} A^{91} = 5,018340$ $P^{91} B^{91} = 5,023024$ $P^{92} A^{91} = 5,026653$ $P^{92} B^{91} = 5,030042$ $P^{91} P^{92} = 5,323532$	
$P^{92} = 6 48 50,4$ $A^{92} = 173 52 37$ $B^{92} = 173 9 29$ $P^{93} = 6 9 20,3$ $S = 360 0 16,7$	$P^{92} = 3 13 14,7$ $A^{92} = 173 52 37$ $P^{93} = 2 54 23,8$ $S = 180 0 15,5$	$P^{92} = 3 35 35,7$ $B^{92} = 173 9 29$ $P^{93} = 3 14 56,5$ $S = 180 0 12$	$P^{92} = 6 48 50,2$ $A^{92} = 86 54 39$ $B^{92} = 86 16 24$ $S = 179 59 53,2$	$P^{93} = 6 9 20,1$ $A^{92} = 86 57 58$ $B^{92} = 86 53 5$ $S = 180 0 23,1$	$A^{92} B^{92} = 4,237022$ $P^{92} A^{92} = 5,161889$ $P^{92} B^{92} = 5,162140$ $P^{93} A^{92} = 5,206108$ $P^{93} B^{92} = 5,206101$ $P^{92} P^{93} = 5,484934$	
Anm. Von dem Winkel $A^{92}$ sind vor der Ausgleichung $45''$ abgezogen worden.						
$P^{93} = 7 35 8,3$ $A^{93} = 154 11 3$ $B^{93} = 192 18 3$ $P^{94} = 5 55 53,6$ $S = 360 0 7,9$	$P^{93} = 14 31 38,3$ $A^{93} = 154 11 3$ $P^{94} = 11 17 19,6$ $S = 180 0 0,9$	$P^{93} = 6 56 30,0$ $B^{93} = 167 41 57$ $P^{94} = 5 21 26,0$ $S = 179 59 53,0$	$P^{93} = 7 35 7,3$ $A^{93} = 75 24 52$ $B^{93} = 96 59 39$ $S = 179 59 38,3$	$P^{94} = 5 55 52,6$ $A^{93} = 78 46 11$ $B^{93} = 95 18 24$ $S = 180 0 27,6$	$A^{93} B^{93} = 4,285454$ $P^{93} A^{93} = 5,161624$ $P^{93} B^{93} = 5,150650$ $P^{94} A^{93} = 5,269342$ $P^{94} B^{93} = 5,262802$ $P^{93} P^{94} = 5,508902$	
$P^{94} = 5 44 44,1$ $A^{94} = 171 9 13$ $B^{94} = 177 41 58$ $P^{95} = 5 24 4,5$ $S = 359 59 59,6$	$P^{94} = 4 33 48,1$ $A^{94} = 171 9 13$ $P^{95} = 4 17 4,2$ $S = 180 0 5,3$	$P^{94} = 1 10 56,0$ $B^{94} = 177 41 58$ $P^{95} = 1 7 0,3$ $S = 179 59 54,3$	$P^{94} = 5 44 44,1$ $A^{94} = 86 38 41$ $B^{94} = 87 36 49$ $S = 180 0 14,1$	$P^{95} = 5 24 4,5$ $A^{94} = 84 30 32$ $B^{94} = 90 5 9$ $S = 179 59 45,5$	$A^{94} B^{94} = 4,189370$ $P^{94} A^{94} = 5,188508$ $P^{94} B^{94} = 5,188141$ $P^{95} A^{94} = 5,215642$ $P^{95} B^{94} = 5,213646$ $P^{94} P^{95} = 5,502023$	
$P^{95} = 10 32 2,9$ $A^{95} = 179 20 11$ $B^{95} = 162 6 23$ $P^{96} = 8 1 27,7$ $S = 360 0 4,6$	$P^{95} = 0 22 35,6$ $A^{95} = 179 20 11$ $P^{96} = 0 17 14,8$ $S = 180 0 1,4$	$P^{95} = 10 9 27,3$ $B^{95} = 162 6 23$ $P^{96} = 7 44 12,9$ $S = 179 59 3,2$	$P^{95} = 10 32 2,3$ $A^{95} = 89 4 25$ $B^{95} = 79 23 50$ $S = 180 0 17,3$	$P^{96} = 8 1 27,1$ $A^{95} = 90 15 46$ $B^{95} = 82 42 33$ $S = 179 59 46,1$	$A^{95} B^{95} = 4,332729$ $P^{95} A^{95} = 5,063226$ $P^{95} B^{95} = 5,070652$ $P^{96} A^{95} = 5,184347$ $P^{96} B^{95} = 5,187866$ $P^{95} P^{96} = 5,429013$	



Winkel im Viereck	Verbessert	Winkel im Dreieck			Verb.	p <sup>n+1</sup>	Verb.	Log. der Seiten
		A	B	p <sup>n</sup>				
P <sup>96</sup> = 8° 11' 17,4	16,7	P <sup>96</sup> = 12° 8' 16,0	P <sup>96</sup> = 3° 56' 58,6	P <sup>96</sup> = 8° 11' 16,7	P <sup>97</sup> = 5° 55' 54,5	A <sup>96</sup> B <sup>96</sup> = 4,189679		
A <sup>96</sup> = 158 25 13	53,9	A <sup>96</sup> = 158 25 13	B <sup>96</sup> = 172 32 3	A <sup>96</sup> = 107 15 52	A <sup>96</sup> = 51 9 21	P <sup>96</sup> A <sup>96</sup> = 4,991774		
B <sup>96</sup> = 187 27 57	54,9	P <sup>97</sup> = 9 26 48,0	P <sup>97</sup> = 3 30 52,8	B <sup>96</sup> = 64 33 9	B <sup>96</sup> = 122 54 48	P <sup>96</sup> B <sup>96</sup> = 5,016093		
P <sup>97</sup> = 5 55 55,2	54,5	S = 180 0 17,0	S = 179 59 54,4	S = 180 0 17,7	S = 180 0 3,5	P <sup>97</sup> A <sup>96</sup> = 5,099412		
S = 360 0 22,6						P <sup>97</sup> B <sup>96</sup> = 5,066845		
Anm. Von dem Winkel A <sup>96</sup> sind von der Ausgleichung 47'' abgezogen worden.								
P <sup>97</sup> = 6 50 38,0	39,1	P <sup>97</sup> = 7 52 43,1	P <sup>97</sup> = 1 2 5,1	P <sup>97</sup> = 6 50 39,1	P <sup>98</sup> = 5 22 2,5	A <sup>97</sup> B <sup>97</sup> = 4,180593		
A <sup>97</sup> = 165 50 19	22,2	A <sup>97</sup> = 165 50 19	B <sup>97</sup> = 178 3 7	A <sup>97</sup> = 108 26 3	A <sup>97</sup> = 57 24 16	P <sup>97</sup> A <sup>97</sup> = 5,060716		
B <sup>97</sup> = 181 56 53	56,2	P <sup>98</sup> = 6 16 57,2	P <sup>98</sup> = 0 54 55,8	B <sup>97</sup> = 64 43 27	B <sup>97</sup> = 117 13 26	P <sup>97</sup> B <sup>97</sup> = 5,081551		
P <sup>98</sup> = 5 22 1,4	2,5	S = 179 59 59,3	S = 180 0 7,9	S = 180 0 9,1	S = 179 59 44,5	P <sup>98</sup> A <sup>97</sup> = 5,158594		
S = 359 59 51,4						P <sup>98</sup> B <sup>97</sup> = 5,135167		
P <sup>98</sup> = 7 40 12,1	12,3	P <sup>98</sup> = 6 28 30,2	P <sup>98</sup> = 1 11 44,9	P <sup>98</sup> = 7 40 12,3	P <sup>99</sup> = 6 55 7,9	A <sup>98</sup> B <sup>98</sup> = 3,997771		
A <sup>98</sup> = 167 40 48	48,4	A <sup>98</sup> = 167 40 48	B <sup>98</sup> = 177 43 51	A <sup>98</sup> = 83 47 5	A <sup>98</sup> = 83 53 43	P <sup>98</sup> A <sup>98</sup> = 4,872251		
B <sup>98</sup> = 177 43 51	51,4	P <sup>99</sup> = 5 50 29,3	P <sup>99</sup> = 1 4 38,4	B <sup>98</sup> = 88 32 47	B <sup>98</sup> = 89 11 4	P <sup>98</sup> B <sup>98</sup> = 4,869831		
P <sup>99</sup> = 6 55 7,7	7,9	S = 179 59 47,5	S = 180 0 11,3	S = 180 0 4,3	S = 179 59 54,9	P <sup>99</sup> A <sup>98</sup> = 4,916871		
S = 359 59 58,8						P <sup>99</sup> B <sup>98</sup> = 4,914446		
P <sup>99</sup> = 3 30 3,4	31,4	P <sup>99</sup> = 2 2 36,1	P <sup>99</sup> = 1 0 54,3	P <sup>99</sup> = 3 31,4	P <sup>100</sup> = 5 27 22,2	A <sup>99</sup> B <sup>99</sup> = 4,012356		
A <sup>99</sup> = 174 19 31	33,7	A <sup>99</sup> = 174 19 31	B <sup>99</sup> = 177 9 30	A <sup>99</sup> = 93 6 48	A <sup>99</sup> = 81 12 43	P <sup>99</sup> A <sup>99</sup> = 5,282617		
B <sup>99</sup> = 177 9 30	32,7	P <sup>100</sup> = 3 37 44,1	P <sup>100</sup> = 1 49 37,1	B <sup>99</sup> = 83 49 25	B <sup>99</sup> = 93 20 5	P <sup>99</sup> B <sup>99</sup> = 5,284503		
P <sup>100</sup> = 5 27 21,2	22,2	S = 179 59 51,2	S = 180 0 1,4	S = 179 59 44,4	S = 180 0 10,2	P <sup>100</sup> A <sup>99</sup> = 5,033513		
S = 359 59 52,6						P <sup>100</sup> B <sup>99</sup> = 5,029118		
P <sup>100</sup> = 4 55 41,3	42,2	P <sup>100</sup> = 4 23 30,2	P <sup>100</sup> = 0 32 11,1	P <sup>100</sup> = 4 55 42,2	P <sup>101</sup> = 5 28 27,4	A <sup>100</sup> B <sup>100</sup> = 4,117001		
A <sup>100</sup> = 170 45 19	21,7	A <sup>100</sup> = 170 45 19	B <sup>100</sup> = 178 50 26	A <sup>100</sup> = 99 11 52	A <sup>100</sup> = 71 33 27	P <sup>100</sup> A <sup>100</sup> = 5,169620		
B <sup>100</sup> = 178 50 26	28,7	P <sup>101</sup> = 4 51 11,8	P <sup>101</sup> = 0 37 14,7	B <sup>100</sup> = 75 52 22	B <sup>100</sup> = 102 58 4	P <sup>100</sup> B <sup>100</sup> = 5,177337		
P <sup>101</sup> = 5 28 26,5	27,4	S = 180 0 1,0	S = 179 59 51,8	S = 179 59 56,2	S = 179 59 58,4	P <sup>101</sup> A <sup>100</sup> = 5,126239		
S = 359 59 52,8						P <sup>101</sup> B <sup>100</sup> = 5,114563		
						P <sup>100</sup> P <sup>101</sup> = 5,448090		



Winkel im Viereck		Winkel im Dreieck		Log. der Seiten		
Ver- bessert	A	B	$p^a$	Verb.	$p^{n+1}$	Verb.
$P_{101} = 3^\circ 52' 28,2$	$P_{101} = 3^\circ 25' 41,0$	$P_{101} = 7^\circ 18' 9,2$	$P_{101} = 3^\circ 52' 27,5$	$P_{102} = 3^\circ 56' 34,4$	$P_{102} = 3^\circ 56' 34,4$	$A^{101} B^{101} = 3,851918$
$A^{101} = 187$	$A^{101} = 172$	$B^{101} = 165$	$A^{101} = 85$	$A^{101} = 101$	$A^{101} = 101$	$P_{101} A^{101} = 5,022172$
$B^{101} = 165$	$B^{101} = 172$	$B^{101} = 165$	$A^{101} = 85$	$A^{101} = 101$	$A^{101} = 101$	$P_{101} B^{101} = 5,021000$
$P_{102} = 3$	$P_{102} = 3$	$P_{102} = 3$	$B^{101} = 90$	$B^{101} = 74$	$B^{101} = 74$	$P_{102} A^{101} = 4,999082$
$S = 360$	$S = 179$	$S = 179$	$S = 180$	$S = 179$	$S = 179$	$P_{102} B^{101} = 5,006117$
						$P_{101} P_{102} = 5,310986$
$P_{102} = 4$	$P_{102} = 5$	$P_{102} = 1$	$P_{102} = 4$	$P_{103} = 6$	$P_{103} = 6$	$A^{102} B^{102} = 4,325220$
$A^{102} = 165$	$A^{102} = 43$	$B^{102} = 176$	$P_{102} = 4$	$P_{103} = 6$	$P_{103} = 6$	$P_{102} A^{102} = 5,428713$
$B^{102} = 183$	$A^{102} = 165$	$B^{102} = 176$	$A^{102} = 79$	$A^{102} = 86$	$A^{102} = 86$	$P_{102} B^{102} = 5,423532$
$P_{103} = 6$	$P_{103} = 8$	$P_{103} = 1$	$B^{102} = 96$	$B^{102} = 86$	$B^{102} = 86$	$P_{103} A^{102} = 5,239631$
$S = 359$	$S = 180$	$S = 180$	$S = 180$	$S = 179$	$S = 179$	$P_{103} B^{102} = 5,239456$
						$P_{102} P_{103} = 5,642053$
$P_{103} = 7$	$P_{103} = 1$	$P_{103} = 5$	$P_{103} = 7$	$P_{104} = 4$	$P_{104} = 4$	$A^{103} B^{103} = 3,836881$
$A^{103} = 176$	$P_{103} = 52$	$B^{103} = 170$	$P_{103} = 7$	$P_{104} = 4$	$P_{104} = 4$	$P_{103} A^{103} = 4,710627$
$B^{103} = 170$	$A^{103} = 176$	$B^{103} = 170$	$A^{103} = 93$	$A^{103} = 83$	$A^{103} = 83$	$P_{103} B^{103} = 4,718105$
$P_{104} = 4$	$P_{104} = 1$	$P_{104} = 3$	$B^{103} = 78$	$B^{103} = 92$	$B^{103} = 92$	$P_{104} A^{103} = 4,925150$
$S = 360$	$S = 180$	$S = 179$	$S = 180$	$S = 179$	$S = 179$	$P_{104} B^{103} = 4,922447$
						$P_{103} P_{104} = 5,431889$
$P_{104} = 5$	$P_{104} = 158$	$P_{104} = 158$	$P_{104} = 5$	$P_{105} = 3$	$P_{105} = 3$	$A^{104} B^{104} = 4,107020$
$A^{104} = 191$	$P_{104} = 168$	$B^{104} = 158$	$P_{104} = 5$	$P_{105} = 3$	$P_{105} = 3$	$P_{104} A^{104} = 5,089559$
$B^{104} = 158$	$A^{104} = 168$	$B^{104} = 158$	$A^{104} = 77$	$A^{104} = 114$	$A^{104} = 114$	$P_{104} B^{104} = 5,082023$
$P_{105} = 3$	$P_{105} = 5$	$P_{105} = 8$	$B^{104} = 96$	$B^{104} = 61$	$B^{104} = 61$	$P_{105} A^{104} = 5,218046$
$S = 360$	$S = 180$	$S = 179$	$S = 180$	$S = 180$	$S = 180$	$P_{105} B^{104} = 5,232737$
						$P_{104} P_{105} = 5,457257$
$P_{105} = 3$	$P_{105} = 15$	$P_{105} = 12$	$P_{105} = 3$	$P_{106} = 3$	$P_{106} = 3$	$A^{105} B^{105} = 3,765520$
$A^{105} = 147$	$P_{105} = 23$	$B^{105} = 154$	$P_{105} = 3$	$P_{106} = 3$	$P_{106} = 3$	$P_{105} A^{105} = 5,013079$
$B^{105} = 205$	$A^{105} = 147$	$B^{105} = 154$	$A^{105} = 68$	$A^{105} = 79$	$A^{105} = 79$	$P_{105} B^{105} = 5,004585$
$P_{106} = 3$	$P_{106} = 17$	$P_{106} = 13$	$B^{105} = 108$	$B^{105} = 97$	$B^{105} = 97$	$P_{106} A^{105} = 4,969263$
$S = 360$	$S = 180$	$S = 179$	$S = 180$	$S = 180$	$S = 180$	$P_{106} B^{105} = 4,964935$
						$P_{105} P_{106} = 5,275144$



Winkel im Viereck		Winkel im Dreieck			Log. der Seiten		
Winkel im Viereck	Ver- bessert	A	B	$p^z$	Verb.	$p^z+1$	Verb.
$P_{106} = 3^{\circ} 44' 26,3$	25,6	$P_{106} = 5^{\circ} 39' 52,8$	$P_{106} = 9^{\circ} 24' 19,1$	$P_{106} = 3^{\circ} 44' 25,6$	$P_{107} = 3^{\circ} 12' 19,7$	$A_{106} B_{106} = 3,865554$	
$A_{106} = 190 27 31$	28,8	$A_{106} = 169 32 29$	$B_{106} = 162 35 48$	$A_{106} = 97 20 51$	$A_{106} = 93 6 40$	$P_{106} A_{106} = 5,042882$	
$B_{106} = 162 35 48$	45,9	$P_{107} = 4 47 30,9$	$P_{107} = 7 59 51,3$	$B_{106} = 78 54 48$	$B_{106} = 83 41 0$	$P_{106} B_{106} = 5,047484$	
$P_{107} = 3 12 20,4$	19,7	$S = 179 59 52,7$	$S = 179 59 58,4$	$S = 180 0 4,6$	$S = 179 59 59,7$	$P_{107} A_{106} = 5,115370$	
$S = 360 0 5,7$						$P_{107} B_{106} = 5,117374$	
						$P_{106} P_{107} = 5,379868$	
$P_{107} = 11 3 10,9$	10,1	$P_{107} = 7 4 59,3$	$P_{107} = 3 58 11,6$	$P_{107} = 11 3 10,1$	$P_{108} = 7 2 12,7$	$A_{107} B_{107} = 4,183566$	
$A_{107} = 168 25 52$	49,6	$A_{107} = 168 25 52$	$B_{107} = 173 28 50$	$A_{107} = 85 38 36$	$A_{107} = 82 47 16$	$P_{107} A_{107} = 4,897939$	
$B_{107} = 173 28 50$	47,6	$P_{108} = 4 29 17,8$	$P_{108} = 2 32 55,7$	$B_{107} = 83 18 5$	$B_{107} = 90 10 45$	$P_{107} B_{107} = 4,899655$	
$P_{108} = 7 2 13,5$	12,7	$S = 180 0 9,1$	$S = 179 59 57,3$	$S = 179 59 51,1$	$S = 180 0 13,7$	$P_{108} A_{107} = 5,095398$	
$S = 360 0 6,4$						$P_{108} B_{107} = 5,091950$	
						$P_{107} P_{108} = 5,306720$	
$P_{108} = 14 6 41,6$	41,0	$P_{108} = 2 53 30,5$	$P_{108} = 17 0 12,1$	$P_{108} = 14 6 41,0$	$P_{109} = 4 42 43,5$	$A_{108} B_{108} = 4,165152$	
$A_{108} = 183 51 0$	58,3	$A_{108} = 176 9 0$	$B_{108} = 157 19 39$	$A_{108} = 89 27 8$	$A_{108} = 94 23 52$	$P_{108} A_{108} = 4,765821$	
$B_{108} = 157 19 39$	37,2	$P_{109} = 0 57 33,4$	$P_{109} = 5 40 17,5$	$B_{108} = 76 26 14$	$B_{108} = 80 53 25$	$P_{108} B_{108} = 4,778086$	
$P_{109} = 4 42 44,1$	43,5	$S = 180 0 3,9$	$S = 180 0 8,6$	$S = 180 0 3,0$	$S = 180 0 0,5$	$P_{109} A_{108} = 5,245042$	
$S = 360 0 4,7$						$P_{109} B_{108} = 5 249274$	
						$P_{108} P_{109} = 5,369273$	
$P_{109} = 4 59 59,2$	58,4	$P_{109} = 1 14 55,1$	$P_{109} = 3 45 4,1$	$P_{109} = 4 59 58,4$	$P_{110} = 5 45 4,0$	$A_{109} B_{109} = 4,102845$	
$A_{109} = 177 17 42$	39,8	$A_{109} = 177 17 42$	$B_{109} = 171 57 20$	$A_{109} = 81 42 47$	$A_{109} = 95 34 55$	$P_{109} A_{109} = 5,161871$	
$B_{109} = 171 57 20$	17,8	$P_{110} = 1 27 33,2$	$P_{110} = 4 17 31,6$	$B_{109} = 93 17 32$	$B_{109} = 78 39 48$	$P_{109} B_{109} = 5,158026$	
$P_{110} = 5 45 4,8$	4,0	$S = 180 0 10,3$	$S = 179 59 55,7$	$S = 180 0 17,4$	$S = 179 59 47,0$	$P_{110} A_{109} = 5,093391$	
$S = 360 0 6,0$						$P_{110} B_{109} = 5,099880$	
						$P_{109} P_{110} = 5,429893$	
$P_{110} = 4 40 31,7$	31,8	$P_{110} = 7 15 39,5$	$P_{110} = 2 35 7,8$	$P_{110} = 4 40 31,8$	$P_{111} = 5 34 1,4$	$A_{110} B_{110} = 4,067773$	
$A_{110} = 164 5 53$	53,4	$A_{110} = 164 5 53$	$B_{110} = 174 20 27$	$A_{110} = 82 4 47$	$A_{110} = 82 1 6$	$P_{110} A_{110} = 5,153854$	
$B_{110} = 185 39 33$	33,4	$P_{111} = 8 38 35,6$	$P_{111} = 3 4 34,3$	$B_{110} = 93 14 28$	$B_{110} = 92 25 5$	$P_{110} B_{110} = 5,152389$	
$P_{111} = 5 34 1,3$	1,4	$S = 180 0 8,1$	$S = 180 0 9,1$	$S = 179 59 46,8$	$S = 180 0 12,4$	$P_{111} A_{110} = 5,080568$	
$S = 359 59 59,0$						$P_{111} B_{110} = 5,076725$	
						$P_{110} P_{111} = 5,446711$	



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	$p^a$	Verb.	$p^{a+1}$	Verb.	
$P_{1111} = 5^\circ 23' 57,4$ $A_{1111} = 182 55 52$ $B_{1111} = 167 20 44$ $P_{1112} = 4 19 28,0$ $S = 360 0 1,4$	$P_{1111} = 1^\circ 37' 34,8$ $A_{1111} = 177 4 8$ $P_{1112} = 1 18 12,8$ $S = 179 59 55,6$	$P_{1111} = 7^\circ 1' 32,2$ $B_{1111} = 167 20 44$ $P_{1112} = 5 37 40,8$ $S = 179 59 57,0$	$P_{1111} = 5^\circ 23' 57,2$ $A_{1111} = 90 46 39$ $B_{1111} = 83 49 19$ $S = 179 59 55,2$	$44,4$ $21,4$ $S = 180 0 5,8$	$P_{1112} = 4^\circ 19' 27,8$ $A_{1111} = 92 9 13$ $B_{1111} = 83 31 25$ $S = 180 0 5,8$	$10,1$ $22,1$	$A_{1111} B_{1111} = 4,207454$ $P_{1111} A_{1111} = 5,231359$ $P_{1111} B_{1111} = 5,233848$ $P_{1112} A_{1111} = 5,327283$ $P_{1112} B_{1111} = 5,329757$ $P_{1111} P_{1112} = 5,582854$ $A_{1112} B_{1112} = 4,255181$ $P_{1112} A_{1112} = 5,332457$ $P_{1112} B_{1112} = 5,327177$ $P_{1113} A_{1112} = 5,227523$ $P_{1113} B_{1112} = 5,219873$ $P_{1112} P_{1113} = 5,575399$ $A_{1113} B_{1113} = 4,134151$ $P_{1113} A_{1113} = 5,044940$ $P_{1113} B_{1113} = 5,051592$ $P_{1114} A_{1113} = 5,111360$ $P_{1114} B_{1113} = 5,104851$ $P_{1113} P_{1114} = 5,379550$ $A_{1114} B_{1114} = 4,402796$ $P_{1114} A_{1114} = 5,236314$ $P_{1114} B_{1114} = 5,232476$ $P_{1115} A_{1114} = 5,439539$ $P_{1115} B_{1114} = 5,440265$ $P_{1114} P_{1115} = 5,649398$ $A_{1115} B_{1115} = 4,147784$ $P_{1115} A_{1115} = 5,213263$ $P_{1115} B_{1115} = 5,215113$ $P_{1116} A_{1115} = 5,120178$ $P_{1116} B_{1115} = 5,121824$ $P_{1115} P_{1116} = 5,470230$
$P_{1112} = 4 46 33,1$ $A_{1112} = 156 51 48$ $B_{1112} = 192 16 54$ $P_{1113} = 6 4 48,4$ $S = 360 0 3,5$	$P_{1112} = 10 9 37,7$ $A_{1112} = 156 51 48$ $P_{1113} = 12 58 44,6$ $S = 180 0 10,3$	$P_{1112} = 5 23 4,6$ $B_{1112} = 167 43 6$ $P_{1113} = 6 53 56,2$ $S = 180 0 6,8$	$P_{1112} = 4 46 32,6$ $A_{1112} = 79 19 12$ $B_{1112} = 95 54 24$ $S = 180 0 8,6$	$7,7$ $19,7$ $S = 179 59 53,9$	$P_{1113} = 6 4 47,9$ $A_{1112} = 77 32 36$ $B_{1112} = 96 22 30$ $S = 179 59 53,9$	$39,1$ $33,0$	
$P_{1113} = 6 55 55,0$ $A_{1113} = 172 37 36$ $B_{1113} = 174 25 13$ $P_{1114} = 6 1 34,3$ $S = 360 0 18,3$	$P_{1113} = 3 58 16,4$ $A_{1113} = 172 37 36$ $P_{1114} = 3 24 21,3$ $S = 180 0 13,7$	$P_{1113} = 2 57 38,6$ $B_{1113} = 174 25 13$ $P_{1114} = 2 37 13,0$ $S = 180 0 4,6$	$P_{1113} = 6 55 52,7$ $A_{1113} = 93 44 35$ $B_{1113} = 79 19 41$ $S = 180 0 8,7$	$30,7$ $36,6$ $S = 180 0 5,0$	$P_{1114} = 6 1 32,0$ $A_{1113} = 78 53 1$ $B_{1113} = 95 5 32$ $S = 180 0 5,0$	$58,5$ $29,5$	
$P_{1114} = 8 26 10,3$ $A_{1114} = 170 45 59$ $B_{1114} = 175 32 16$ $P_{1115} = 5 15 41,8$ $S = 360 0 7,1$	$P_{1114} = 5 40 46,2$ $A_{1114} = 170 45 59$ $P_{1115} = 3 33 15,6$ $S = 180 0 0,8$	$P_{1114} = 2 45 24,1$ $B_{1114} = 175 32 16$ $P_{1115} = 1 42 26,2$ $S = 180 0 6,3$	$P_{1114} = 8 26 9,4$ $A_{1114} = 82 21 22$ $B_{1114} = 89 12 46$ $S = 180 0 17,4$	$13,3$ $37,3$ $S = 179 59 47,9$	$P_{1115} = 5 15 40,9$ $A_{1114} = 88 24 37$ $B_{1114} = 86 19 30$ $S = 179 59 47,9$	$43,1$ $36,0$	
$P_{1115} = 4 54 45,8$ $A_{1115} = 179 22 45$ $B_{1115} = 169 36 56$ $P_{1116} = 6 5 35,2$ $S = 360 0 2,0$	$P_{1115} = 0 16 48,7$ $A_{1115} = 179 22 45$ $P_{1116} = 0 20 39,7$ $S = 180 0 13,4$	$P_{1115} = 4 37 57,1$ $B_{1115} = 169 36 56$ $P_{1116} = 5 44 55,5$ $S = 179 59 48,6$	$P_{1115} = 4 54 45,6$ $A_{1115} = 90 23 10$ $B_{1115} = 84 42 3$ $S = 179 59 58,6$	$10,7$ $3,7$ $S = 180 0 3,0$	$P_{1116} = 6 5 35,0$ $A_{1115} = 88 59 35$ $B_{1115} = 84 54 53$ $S = 180 0 3,0$	$33,5$ $51,5$	

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Winkel im Viereck		Winkel im Dreieck			Log. der Seiten	
Verbessert	A	B	$P^a$	Verb.	$P^{n+1}$	Verb.
$P_{116} = 5^{\circ} 5' 13,7$	$P_{116} = 2^{\circ} 21' 57,6$	$P_{116} = 2^{\circ} 43' 16,1$	$P_{116} = 5^{\circ} 5' 13,7$	$P_{117} = 6^{\circ} 19' 39,5$	$A_{116} B_{116} = 4,247376$	
$A_{116} = 174^{\circ} 44' 36$	$A_{116} = 174^{\circ} 44' 36$	$B_{116} = 173^{\circ} 54' 3$	$A_{116} = 87^{\circ} 21' 39$	$A_{116} = 87^{\circ} 19' 57$	$P_{116} A_{116} = 5,299201$	
$B_{116} = 173^{\circ} 54' 3$	$P_{117} = 2^{\circ} 56' 39,3$	$P_{117} = 3^{\circ} 23' 0,2$	$B_{116} = 87^{\circ} 33' 20$	$B_{116} = 86^{\circ} 20' 43$	$P_{116} B_{116} = 5,299135$	
$P_{117} = 6^{\circ} 19' 39,5$	$S = 180^{\circ} 0' 12,9$	$S = 180^{\circ} 0' 19,3$	$S = 180^{\circ} 0' 12,7$	$S = 180^{\circ} 0' 19,5$	$P_{117} A_{116} = 5,204265$	
$S = 360^{\circ} 0' 32,2$					$P_{117} B_{116} = 5,204679$	
					$P_{116} P_{117} = 5,554889$	
Anm. Da der starke Fehler von $52''$ auf beide Seitendreiecke ziemlich gleichmässig vertheilt ist, so sind bei der Ausgleichung nur die Winkel $A_{116}$ und $B_{116}$ corrigirt worden.						
$P_{117} = 5^{\circ} 50' 2,1$	$P_{117} = 2^{\circ} 2' 40,1$	$P_{117} = 3^{\circ} 47' 22,0$	$P_{117} = 5^{\circ} 20' 0,8$	$P_{118} = 7^{\circ} 10' 0,9$	$A_{117} B_{117} = 4,258160$	
$A_{117} = 175^{\circ} 26' 53$	$A_{117} = 175^{\circ} 26' 53$	$B_{117} = 171^{\circ} 33' 13$	$A_{117} = 88^{\circ} 27' 46$	$A_{117} = 86^{\circ} 59' 7$	$P_{117} A_{117} = 5,249878$	
$B_{117} = 171^{\circ} 33' 13$	$P_{118} = 2^{\circ} 30' 34,2$	$P_{118} = 4^{\circ} 39' 28,0$	$B_{117} = 85^{\circ} 42' 13$	$B_{117} = 85^{\circ} 51' 0$	$P_{117} B_{117} = 5,250944$	
$P_{118} = 7^{\circ} 10' 2,2$	$S = 180^{\circ} 0' 7,3$	$S = 180^{\circ} 0' 3,0$	$S = 179^{\circ} 59' 59,8$	$S = 180^{\circ} 0' 7,9$	$P_{118} A_{117} = 5,160943$	
$S = 360^{\circ} 0' 10,3$					$P_{118} B_{117} = 5,161482$	
					$P_{117} P_{118} = 5,508372$	
$P_{118} = 5^{\circ} 43' 17,1$	$P_{118} = 5^{\circ} 13' 10,7$	$P_{118} = 0^{\circ} 30' 6,4$	$P_{118} = 5^{\circ} 43' 15,7$	$P_{119} = 7^{\circ} 31' 55,4$	$A_{118} B_{118} = 4,118430$	
$A_{118} = 167^{\circ} 54' 50$	$A_{118} = 167^{\circ} 54' 50$	$B_{118} = 178^{\circ} 50' 7$	$A_{118} = 84^{\circ} 41' 55$	$A_{118} = 83^{\circ} 12' 55$	$P_{118} A_{118} = 5,119788$	
$B_{118} = 178^{\circ} 50' 7$	$P_{119} = 6^{\circ} 52' 10,1$	$P_{119} = 0^{\circ} 39' 46,7$	$B_{118} = 89^{\circ} 34' 52$	$B_{118} = 89^{\circ} 15' 15$	$P_{118} B_{118} = 5,117938$	
$P_{119} = 7^{\circ} 31' 56,8$	$S = 180^{\circ} 0' 10,8$	$S = 180^{\circ} 0' 0,1$	$S = 180^{\circ} 0' 2,7$	$S = 180^{\circ} 0' 5,4$	$P_{119} A_{118} = 5,000854$	
$S = 360^{\circ} 0' 10,9$					$P_{119} B_{118} = 4,997838$	
					$P_{118} P_{119} = 5,363035$	
$P_{119} = 6^{\circ} 54' 10,0$	$P_{119} = 6^{\circ} 38' 43,5$	$P_{119} = 0^{\circ} 15' 26,5$	$P_{119} = 6^{\circ} 54' 10,1$	$P_{120} = 7^{\circ} 5' 38,1$	$A_{119} B_{119} = 4,322583$	
$A_{119} = 166^{\circ} 31' 28$	$A_{119} = 166^{\circ} 31' 28$	$B_{119} = 179^{\circ} 28' 43$	$A_{119} = 81^{\circ} 6' 25$	$A_{119} = 85^{\circ} 25' 3$	$P_{119} A_{119} = 5,242468$	
$B_{119} = 179^{\circ} 28' 43$	$P_{120} = 6^{\circ} 49' 53,4$	$P_{120} = 0^{\circ} 15' 44,6$	$B_{119} = 91^{\circ} 59' 29$	$B_{119} = 87^{\circ} 29' 14$	$P_{119} B_{119} = 5,237476$	
$P_{120} = 7^{\circ} 5' 38,0$	$S = 180^{\circ} 0' 4,9$	$S = 179^{\circ} 59' 54,1$	$S = 180^{\circ} 0' 4,1$	$S = 179^{\circ} 59' 55,1$	$P_{120} A_{119} = 5,230511$	
$S = 359^{\circ} 59' 59,0$					$P_{120} B_{119} = 5,229538$	
					$P_{119} P_{120} = 5,534552$	
$P_{120} = 5^{\circ} 35' 10,4$	$P_{120} = 4^{\circ} 23' 56,7$	$P_{120} = 1^{\circ} 11' 13,7$	$P_{120} = 5^{\circ} 35' 9,8$	$P_{121} = 5^{\circ} 46' 46,1$	$A_{120} B_{120} = 4,262700$	
$A_{120} = 171^{\circ} 3' 37$	$A_{120} = 171^{\circ} 3' 37$	$B_{120} = 177^{\circ} 34' 31$	$A_{120} = 89^{\circ} 38' 46$	$A_{120} = 81^{\circ} 24' 51$	$P_{120} A_{120} = 5,272593$	
$B_{120} = 177^{\circ} 34' 31$	$P_{121} = 4^{\circ} 32' 21,9$	$P_{121} = 1^{\circ} 14' 24,8$	$B_{120} = 84^{\circ} 46' 15$	$B_{120} = 92^{\circ} 48' 16$	$P_{120} B_{120} = 5,274397$	
$P_{121} = 5^{\circ} 46' 46,7$	$S = 179^{\circ} 59' 55,6$	$S = 180^{\circ} 0' 9,5$	$S = 180^{\circ} 0' 10,8$	$S = 179^{\circ} 59' 53,1$	$P_{121} A_{120} = 5,259150$	
$S = 360^{\circ} 0' 5,1$					$P_{121} B_{120} = 5,254777$	
					$P_{120} P_{121} = 5,565631$	



Winkel im Viereck		Winkel im Dreieck				Log. der Seiten	
Verbessert	A	B	$p^a$	Verb.	$p^{a+1}$	Verb.	
$P^{121} = 5^\circ 32' 31,7$ $A^{121} = 168 37 57$ $B^{121} = 177 52 35$ $P^{122} = 7 57 9,5$ $S = 360 0 13,2$	$P^{121} = 4^\circ 40' 14,1$ $A^{121} = 168 37 57$ $P^{122} = 6 41 47,2$ $S = 179 59 58,3$	$P^{121} = 0^\circ 52' 17,6$ $B^{121} = 177 52 35$ $P^{122} = 1 15 22,3$ $S = 180 0 14,9$	$P^{121} = 5^\circ 32' 30,1$ $A^{121} = 86 1 43$ $B^{121} = 88 25 51$ $S = 180 0 4,1$	$P^{122} = 7 57 7,9$ $A^{121} = 82 36 14$ $B^{121} = 89 26 44$ $S = 180 0 5,9$		$A^{121} B^{121} = 4,339265$ $P^{121} A^{121} = 5,354260$ $P^{121} B^{121} = 5,353378$ $P^{122} A^{121} = 5,198275$ $P^{122} B^{121} = 5,194665$ $P^{121} P^{122} = 5,582190$	
$P^{122} = 7 19 59,6$ $A^{122} = 133 48 16$ $B^{122} = 211 18 15$ $P^{123} = 7 33 33,4$ $S = 360 0 4,0$	$P^{122} = 22 47 4,4$ $A^{122} = 133 48 16$ $P^{123} = 23 24 39,4$ $S = 179 59 59,8$	$P^{122} = 15 27 4,8$ $B^{122} = 148 41 45$ $P^{123} = 15 51 6,0$ $S = 179 59 55,8$	$P^{122} = 7 19 59,1$ $A^{122} = 66 32 25$ $B^{122} = 106 7 44$ $S = 180 0 8,1$	$P^{123} = 7 33 32,9$ $A^{122} = 67 15 51$ $B^{122} = 105 10 31$ $S = 179 59 54,9$		$A^{122} B^{122} = 4,313819$ $P^{122} A^{122} = 5,190406$ $P^{122} B^{122} = 5,170370$ $P^{123} A^{122} = 5,179316$ $P^{123} B^{122} = 5,159605$ $P^{122} P^{123} = 5,449641$	

Bei der letzten Station  $P^{123} P^{124}$  erlaubte das sumpfige und grösstentheils mit Wasser bedeckte Terrain, keine Basis aufzustellen; die Entfernung  $P^{123} P^{124}$  lässt sich jedoch auf doppelte Weise herleiten: 1) aus dem Dreieck  $P^{122} P^{123} P^{124}$ , (da die Spitze des Signals  $P^{124}$  von  $P^{122}$  aus sichtbar war.) 2) mit Zuziehung des Belvederes auf dem Herrnhause in Tschernoi Rynok, aus den beiden Dreiecken:  $P^{122} P^{123}$  Belvedere, und  $P^{123}$  Belvedere  $P^{124}$ . Bei allen dreien Dreiecken konnte nur zwei Winkel gemessen werden.

Winkel.		Log. der Seiten.	
1) Dreieck $P^{122} P^{123} P^{124}$			
$P^{122} = 9^\circ 30' 5,4$	$P^{123} = 162 48 30,0$	$P^{122} P^{123} = 5,449641$	
$P^{123} = 162 48 30,0$	$P^{124} = (7 41 24,6)$	$P^{123} P^{124} = 5,540809$	
$P^{124} = (7 41 24,6)$	$S = 179 59 55,8$	$P^{122} P^{124} = 5,793791$	
2) Dreieck $P^{122} P^{123}$ Belved.			
$P^{122} = 16 50 2,5$	$P^{123} = 134 45 4,2$	$P^{122} P^{123} = 5,449641$	
$P^{123} = 134 45 4,2$	Belv. = (28 24 53,3)	$P^{122}$ Belv. = 5,623532	
Belv. = (28 24 53,3)	$S = 180 0 8,1$	$P^{123}$ Belv. = 5,233968	
3) Dreieck $P^{123}$ Belv. $P^{124}$			
$P^{123} = 28 3 25,8$	$P^{124} = 22 20 55,1$	$P^{123} P^{124} = 5,233968$	
$P^{124} = 22 20 55,1$	Belv. = (129 35 39,4)	$P^{123}$ Belv. = 5,326332	
Belv. = (129 35 39,4)	$S = 180 0 8,1$	$P^{123} P^{124} = 5,540726$	

Die beiden so gefundenen Werthe für  $P^{123} P^{124}$  stimmen bis auf 66 Zoll oder  $\frac{1}{5000}$ , bei der nicht vortheilhaften Form der Dreiecke und nur einmal gemessenen Winkeln hinreichend genau, zumal für den eigentlichen Zweck der Nivellirung. Der mittlere Werth von  $P^{123} P^{124}$  ist = 347350 Zoll; Log.  $P^{123} P^{124} = 5,540767$ .



## II. Nebendreiecke zwischen den Signalen und benachbarten Punkten.

Alle in der Nähe unserer Operationslinie liegenden Städte und Dörfer, welche durch einen hervorstechenden guten Zielpunct, z. B. die Spitze einer Kirche ausgezeichnet waren, wurden durch Richtungswinkel von zwei oder mehr Dreieckspuncten der Operationslinie gegen dieselbe bestimmt. In den sich hiedurch bildenden Dreiecken sind also immer zwei Winkel mit der zwischenliegenden Seite bekannt. Ich gebe hier diese Dreiecke in der Aufeinanderfolge, und werde die mit dem kleinen Universalinstrumente gemessenen Richtungen nur in den Fällen benutzen, wo die mit dem grossen Instrumente beobachteten zur Bestimmung eines Punctes nicht hinreichen.

Dreieck.	Winkel	Log. der Seiten	Dreieck	Winkel	Log. der Seiten
$A^1 B^1$ Kagalnik, Kirche	$A^1 = 110^\circ 49' 22,7$ $B^1 = 51 \ 24 \ 42,0$ $K = (17 \ 45 \ 55,3)$	$A^1 B^1 = 4,122390$ $A^1 K = 4,530931$ $B^1 K = 4,608585$	$A^1 P^2$ Kagalnik, Kirche	$A^1 = 60^\circ 20' 32,5$ $P^2 = 14 \ 39 \ 1,4$ $K = (105 \ 0 \ 26,1)$	$A^1 P^2 = 5,112766$ $A^1 K = 4,530820$ $P^2 K = 5,066856$
$P^5 P^6$ Novo-Nicolaewka, Kirche	$P^5 = 44 \ 59 \ 15,3$ $P^6 = 56 \ 26 \ 40,5$ $K = (78 \ 34 \ 4,2)$	$P^5 P^6 = 5,371877$ $P^5 K = 5,301409$ $P^6 K = 5,229971$	$P^7 P^8$ Novo-Ba-taisk, Kirche	$P^7 = 3 \ 58 \ 58,7$ $P^8 = 4 \ 8 \ 9,4$ $K = (171 \ 52 \ 51,9)$	$P^7 P^8 = 5,599426$ $P^7 K = 5,307579$ $P^8 K = 5,291240$
$B^{10} P^{11}$ Kagal-nitzkaja Stanitzka, Kirche Kuppel	$B^{10} = 28 \ 11 \ 22,3$ $P^{11} = 65 \ 8 \ 3,4$ $K = (86 \ 39 \ 34,3)$	$B^{10} P^{11} = 4,845165$ $B^{10} K = 4,803653$ $P^{11} K = 4,520439$	$B^{10} P^{11}$ Kagaln. Stanitzka, Glockenthurm	$B^{10} = 28 \ 18 \ 54,4$ $P^{11} = 64 \ 17 \ 28,5$ $G = (87 \ 23 \ 37,1)$	$B^{10} P^{11} = 4,845165$ $B^{10} G = 4,800344$ $P^{11} G = 4,521686$
$A^{11} B^{11}$ Kagaln. Stan., Kir. Kup.	$A^{11} = 61 \ 36 \ 50,5$ $B^{11} = 110 \ 48 \ 18,4$ $K = (7 \ 34 \ 51,1)$	$A^{11} B^{11} = 4,024348$ $A^{11} K = 4,874737$ $B^{11} K = 4,848387$	$A^{11} B^{11}$ Kagaln. Stan. Glockenthurm	$A^{11} = 61 \ 25 \ 40,2$ $B^{11} = 111 \ 2 \ 39,8$ $G = (7 \ 31 \ 40,0)$	$A^{11} B^{11} = 4,024348$ $A^{11} G = 4,877076$ $B^{11} G = 4,850655$
$A^{11} P^{12}$ Kagaln. Stan., Kir. Kup.	$A^{11} = 160 \ 30 \ 12,2$ $P^{12} = 8 \ 54 \ 14,3$ $K = (10 \ 35 \ 33,5)$	$A^{11} P^{12} = 4,949262$ $A^{11} K = 4,874569$ $P^{12} K = 5 \ 208280$	Anm. Berechnet man die Seiten $P^{11} K$ und $P^{11} G$ aus den Dreiecken $P^{11} B^{11} K$ und $P^{11} B^{11} G$ so erhält man dafür Werthe, welche mit den frühern aus den Dreiecken des Jahres 1856 abgeleiteten, resp. auf 3,5 und 0,2 Zoll stimmen.		
Ueberhaupt sieht man dass die Entfernungen der Kirchen von den Signalpuncten zu dem Zwecke der Bestimmung ihrer geographischen Lage schon so genau sind, dass die Aufsuchung der wahrscheinlichsten Werthe derselben, wenn sie aus mehreren Dreiecken mehrfach bestimmt sind, eine gänzlich überflüssige Arbeit wäre.					
$P^{20} P^{21}$ Novo-Egorlik Kirche, Kuppel	$P^{20} = 45 \ 13 \ 23,0$ $P^{21} = 5 \ 52 \ 11,4$ $K = (128 \ 54 \ 25,6)$	$P^{20} P^{21} = 5,510120$ $P^{20} K = 4,628792$ $P^{21} K = 5,470218$	$P^{23} P^{24}$ Sredni-Egorlick Kirche	$P^{23} = 8 \ 30 \ 59,6$ $P^{24} = 29 \ 41 \ 35,5$ $K = (141 \ 47 \ 24,9)$	$P^{23} P^{24} = 5,519923$ $P^{23} K = 5,423471$ $P^{24} K = 4,899096$
$P^{27} P^{28}$ Pestschanokopsk Kirche	$P^{27} = 6 \ 1 \ 25,6$ $P^{28} = 27 \ 3 \ 25,1$ $K = (146 \ 55 \ 9,3)$	$P^{27} P^{28} = 5,424326$ $P^{27} K = 5,345169$ $P^{28} K = 4,708222$	$P^{31} P^{32}$ Letnitzkoe Kirche	$P^{31} = 2 \ 58 \ 36,2$ $P^{32} = 1 \ 58 \ 14,6$ $K = (175 \ 3 \ 9,2)$	$P^{31} P^{32} = 5,274970$ $P^{31} K = 4 \ 875669$ $P^{32} K = 5,054672$



Dreieck.	Winkel	Log. der Seiten	Dreieck.	Winkel	Log. der Seiten
$P^{41} A^{40}$ Novo-Troitzk Kirche	$P^{41} = 30^\circ 45' 13,2$ $A^{40} = 27 19 19$ $K = (121 55 27,8)$	$P^{41} A^{40} = 5,362473$ $P^{41} K = 5,095498$ $A^{40} K = 5,142411$	$A^{44} B^{44}$ Roshest-wenskoe Kirche	$A^{44} = 71^\circ 7' 50''$ $B^{44} = 103 19 52$ $K = (5 32 18)$	$A^{44} B^{44} = 4,204114$ $A^{44} K = 5,207671$ $B^{44} K = 5,195544$
$P^{47} P^{48}$ Stawropol Cathedrale Kuppel	$P^{47} = 5 30 16,3$ $P^{48} = 110 57 4,8$ $K = (63 32 38,9)$	$P^{47} P^{48} = 5,324100$ $P^{47} K = 5,342435$ $P^{48} K = 4,354071$	$P^{47} P^{48}$ Stawropol Cathedrale Glockenth.	$P^{47} = 5 17 47,9$ $P^{48} = 111 30 0,2$ $G = (63 12 11,9)$	$P^{47} P^{48} = 5,324100$ $P^{47} G = 5,342115$ $P^{48} G = 4,338697$
$P^{52} P^{53}$ Besch-pagir Kirche	$P^{52} = 2 41 0 0$ $P^{53} = 24 26 40,6$ $K = (152 52 19,4)$	$P^{52} P^{53} = 5,532415$ $P^{52} K = 5,490276$ $P^{53} K = 4,543864$	$P^{61} P^{62}$ Alexan-drow Kirche	$P^{61} = 7 42 30,3$ $P^{62} = 113 52 13,9$ $K = (28 25 15,8)$	$P^{61} P^{62} = 5,363640$ $P^{61} K = 5,456647$ $P^{62} K = 4,813613$
$P^{71} P^{70}$ Alexan-dria Kirche	$P^{71} = 41 24 46,4$ $A^{70} = 30 37 22$ $K = (107 57 51,6)$	$P^{71} A^{70} = 5,397104$ $P^{71} K = 5,125848$ $A^{70} K = 5,239320$	$P^{73} P^{74}$ Geor-giewsk Kirche	$P^{73} = 129 26 21,5$ $P^{74} = 12 55 44,7$ $K = (37 37 53,8)$	$P^{73} P^{74} = 5,707519$ $P^{73} K = 5,271527$ $P^{74} K = 5,809558$
$P^{83} P^{84}$ Ekate-rinograd Kirche	$P^{83} = 26 6 11,9$ $P^{84} = 10 29 7,2$ $K = (143 24 40,9)$	$P^{83} P^{84} = 5,417540$ $P^{83} K = 4,902277$ $P^{84} K = 5,285691$	$A^{86} B^{86}$ Pawlo-dolsk Kirche	$A^{86} = 42 13 6$ $B^{86} = 126 56 25$ $K = (10 50 29)$	$A^{86} B^{86} = 4,213948$ $A^{86} K = 4,872269$ $B^{86} K = 4,796922$
$P^{88} P^{89}$ Mosdok Armenische Kir-che	$P^{88} = 37 2 16,3$ $P^{89} = 14 47 44,5$ $K = (128 9 59,2)$	$P^{88} P^{89} = 5,443002$ $P^{88} K = 4,954634$ $P^{89} K = 5,327303$	$P^{88} P^{89}$ Mosdok Russische Cathe-drale	$P^{88} = 47 20 31,8$ $P^{89} = 21 38 27,3$ $K = (111 1 0,9)$	$P^{88} P^{89} = 5,443002$ $P^{88} K = 5,039678$ $P^{89} K = 5,339431$
$A^{92} B^{92}$ Koliugai Kirche	$A^{92} = 2 27 13$ $B^{92} = 177 9 44$ $K = (0 23 3)$	$A^{92} B^{92} = 4,237022$ $A^{92} K = 5,105309$ $B^{92} K = 5,042181$	$A^{94} B^{94}$ Istscherskaja Kir.	$A^{94} = 23 40 45$ $B^{94} = 38 40 22$ $K = (117 38 53)$	$A^{94} B^{94} = 4,189370$ $A^{94} K = 4,037818$ $B^{94} K = 3,845837$
$P^{96} P^{97}$ Naur Kirche	$P^{96} = 44 18 1,5$ $P^{97} = 69 17 14,5$ $K = (66 24 44,0)$	$P^{96} P^{97} = 5,342320$ $P^{96} K = 5,351194$ $P^{97} K = 5,224329$	$A^{113} B^{113} P^{113}$ $a \quad a \quad a$	$A^{113} = 77 45 14$ $B^{113} = 95 30 41$ $P^{113} = (6 44 5)$	$A^{113} B^{113} = 4,162821$ $A^{113} P^{113} = 5,091612$ $B^{113} P^{113} = 5,083628$
$A^{113} B^{114} P^{114}$ $a \quad a \quad a$	$A^{113} = 82 26 10$ $B^{113} = 89 27 33$ $P^{114} = (8 6 17)$	$A^{113} B^{113} = 4,162821$ $A^{113} P^{114} = 5,013635$ $B^{113} P^{114} = 5,009861$	Der log. der Diagonale $P^{113} P^{114}$ findet sich aus den beiden letzten Dreiecken = 5,348934		
$P^{113} P^{114}$ Kis-ljar Armenische Kirche	$P^{113} = 92 0 12,0$ $P^{114} = 63 34 29,6$ $K = (24 25 18,4)$	$P^{113} P^{114} = 5,379550$ $P^{113} K = 5,715198$ $P^{114} K = 5,762859$	$P^{113} P^{114}$ Kis-ljar Russische Ca-thedrale	$P^{113} = 96 36 2,1$ $P^{114} = 59 9 30,6$ $K = (24 14 27,3)$	$P^{113} P^{114} = 5,379550$ $P^{113} K = 5,699944$ $P^{114} K = 5,763271$

Die Dreiecke  $P^{122} P^{123}$  Tschernoi-Rynok und  $P^{123} P^{124}$  Tschernoi-Rynok kommen schon pag. 219 vor. Die Dreiecke zwischen den Signalen und beobachteten Spitzen des Caucasus werden später bei der Berechnung der Lage und Höhe der letzteren im Zusammenhange mitgetheilt werden.