

Winkel

Grad Min Sek ✓

Standpunkt
T₁

$$\angle T_2 T_1 T_3 = 94 \quad 55 \quad 33 \quad \checkmark$$

$$\angle T_2 T_1 T_4 = 46 \quad 13 \quad 06 \quad \checkmark$$

$$\angle T_4 T_1 T_3 = 48 \quad 40 \quad 27 \quad \checkmark$$

Standpunkt
T₂

$$\angle T_1 T_2 T_4 = 98 \quad 42 \quad 36 \quad \checkmark$$

$$\angle T_1 T_2 T_3 = 59 \quad 12 \quad 10 \quad \checkmark$$

$$\angle T_4 T_2 T_3 = 39 \quad 30 \quad 26 \quad \checkmark$$

Standpunkt
T₃

$$\angle T_1 T_3 T_4 = 57 \quad 06 \quad 56 \quad \checkmark$$

$$\angle T_1 T_3 T_2 = 25 \quad 52 \quad 17 \quad \checkmark$$

$$\angle T_2 T_3 T_4 = 31 \quad 15 \quad 50 \quad \checkmark$$

Standpunkt
T₄

$$\angle T_2 T_4 T_3 = 109 \quad 13 \quad 44 \quad \checkmark$$

$$\angle T_2 T_4 T_1 = 324 \quad 57 \quad 53 \quad \checkmark$$

35 03 07

$$\angle T_1 T_4 T_3 = 74 \quad 10 \quad 37 \quad \checkmark$$

Dreiecksschlüsse

$\Delta T_1 T_2 T_3$

$\cancel{4} \bar{T}_1 \bar{T}_2 \bar{T}_3$	✓	59	12	10	✓
$+ \cancel{4} \bar{T}_2 \bar{T}_1 \bar{T}_3$		94	55	33	✓
$+ \cancel{4} \bar{T}_2 \bar{T}_3 \bar{T}_1$	ber.	$\begin{smallmatrix} 25 \\ 2 \end{smallmatrix}$	$\begin{smallmatrix} 52 \\ 1 \end{smallmatrix}$	17	✓
		180	00	00	✓

$\Delta T_1 T_2 T_4$

$\cancel{4} T_1 T_2 T_4$		98	42	36	✓
$+ \cancel{4} T_2 T_1 T_4$		46	13	06	✓
$+ \cancel{4} T_2 T_4 T_1$		35	03	07	✓
		179	58	49	✓

$\Delta T_1 T_3 T_4$

$\cancel{4} T_1 T_3 T_4$		57	06	56	✓
$+ \cancel{4} T_1 T_4 T_3$		74	10	37	✓
$+ \cancel{4} T_4 T_1 T_3$		$\begin{smallmatrix} 48 \\ 2 \end{smallmatrix}$	$\begin{smallmatrix} 42 \\ 1 \end{smallmatrix}$	$\begin{smallmatrix} 27 \\ 2 \end{smallmatrix}$	✓
		180	00	00	✓

$\Delta T_2 T_3 T_4$

$\cancel{4} T_2 T_3 T_4$		31	15	50	✓
$+ \cancel{4} T_3 T_2 T_4$		39	30	26	✓
$+ \cancel{4} T_3 T_4 T_2$		$\begin{smallmatrix} 109 \\ 2 \end{smallmatrix}$	$\begin{smallmatrix} 13 \\ 1 \end{smallmatrix}$	$\begin{smallmatrix} 44 \\ 2 \end{smallmatrix}$	✓
		180	00	00	✓

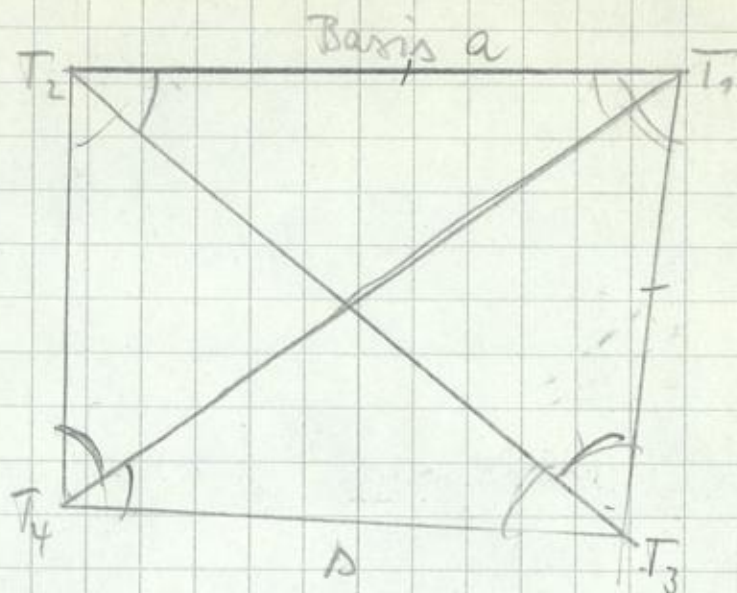
Verbesserte Winkel

$\cancel{4} T_1 T_2 T_3$	✓	59	12	10	✓
$\cancel{4} T_2 T_1 T_3$		94	55	33	✓
$\cancel{4} T_2 T_3 T_1$	✓	25	52	17	✓

● $\cancel{4} T_1 T_2 T_4$		98	43	26	✓
$\cancel{4} T_2 T_1 T_4$	✓	46	13	56	✓
$\cancel{4} T_2 T_4 T_1$	✓	35	03	58	✓

$\cancel{4} T_1 T_3 T_4$		57	06	56	✓
$\cancel{4} T_1 T_4 T_3$	✓	74	10	37	✓
$\cancel{4} T_4 T_1 T_3$	✓	48	42	27	✓

$\cancel{4} T_2 T_3 T_4$	✓	37	15	<u>50</u>	✓
$\cancel{4} T_3 T_2 T_4$	✓	39	30	26	✓
$\cancel{4} T_3 T_4 T_2$		109	13	44	✓



$$\frac{\sin \angle T_1 T_3 T_2}{a} = \frac{\sin \angle T_3 T_2 T_1}{\overline{T_1 T_3}}$$

$$\overline{T_1 T_3} = \frac{a \sin \angle T_3 T_2 T_1}{\sin \angle T_1 T_3 T_2}$$

$$\Delta_1 = \frac{\overline{T_1 T_3} \cdot \sin \angle T_4 T_1 T_3}{\sin \angle T_3 T_4 T_1}$$

$$\Delta_1 = \underline{268,30}$$

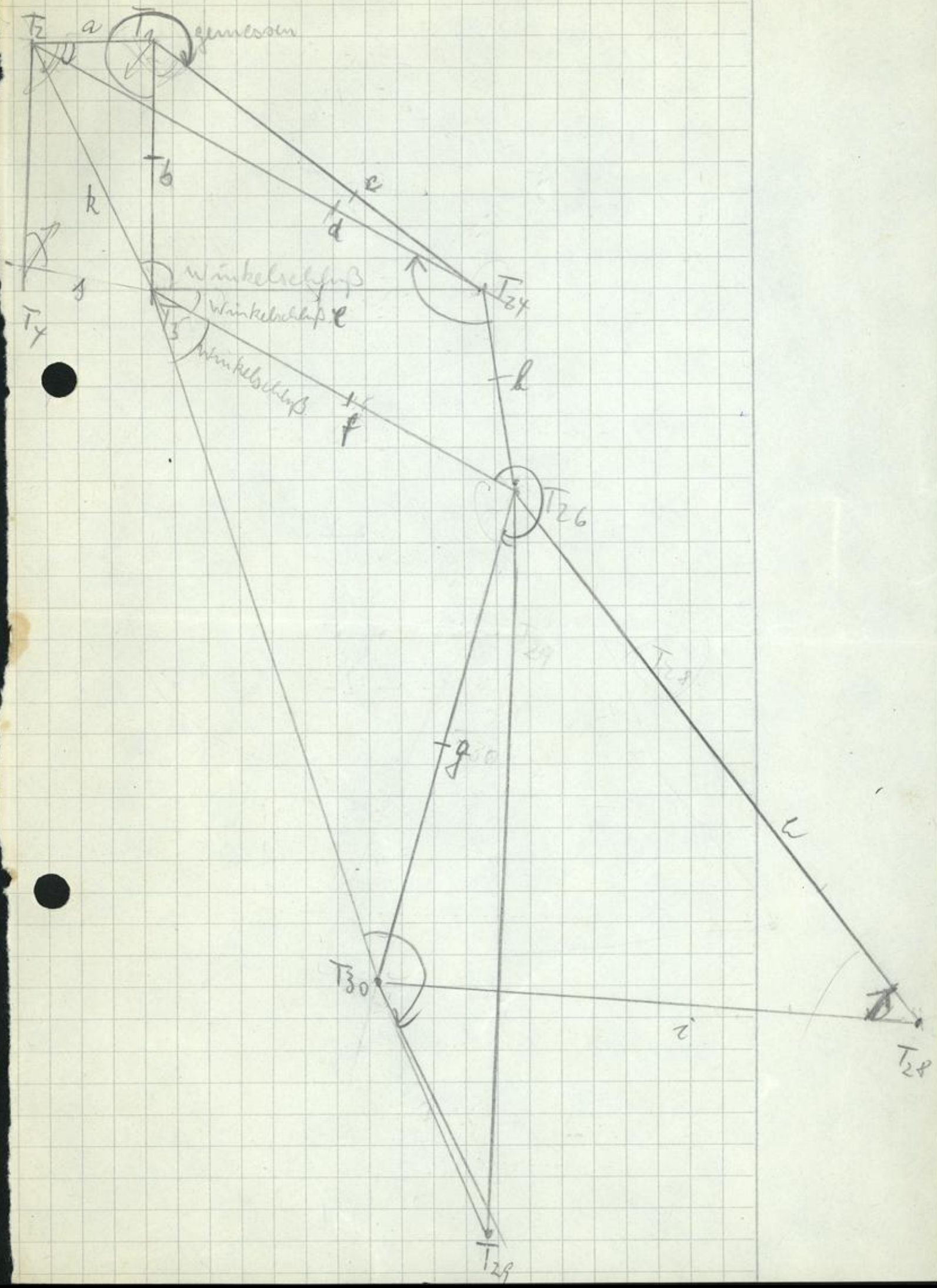
$$\overline{T_2 T_4} = \frac{a \sin \angle T_2 T_1 T_4}{\sin \angle T_1 T_4 T_2}$$

$$\Delta_2 = \frac{\overline{T_2 T_4} \sin \angle T_4 T_2 T_3}{\sin \angle T_2 T_3 T_4}$$

$$\Delta_2 = \underline{268,90}$$

$$\Delta_{\text{ges.}} = \underline{268,80}$$

$$a = 0,6 \text{ m}$$



$$b = \frac{a \cdot \sin \angle T_1 T_2 T_3}{\sin \angle T_1 T_3 T_2}$$

$$c = \frac{d \cdot \sin \angle T_1 T_2 T_{24}}{\sin \angle T_2 T_1 T_{24}}$$

$$d = \frac{a \cdot \sin \angle T_2 T_1 T_{24}}{\sin \angle T_2 T_{24} T_1}$$

$$e = \frac{h \cdot \sin \angle T_3 T_2 T_{24}}{\sin \angle T_2 T_{24} T_3}$$

$$f = \frac{e \cdot \sin \angle T_3 T_{24} T_{26}}{\sin \angle T_3 T_{26} T_{24}}$$

$$g = \frac{f \cdot \sin \angle T_{30} T_3 T_{26}}{\sin \angle T_3 T_{30} T_{26}}$$

$$h = \frac{g \cdot \sin \angle T_{26} T_{30} T_{28}}{\sin \angle T_{26} T_{28} T_{30}}$$

$$i = \frac{g \cdot \sin \angle T_{30} T_{26} T_{28}}{\sin \angle T_{26} T_{28} T_{30}}$$

$$k = \frac{a \cdot \sin \angle T_2 T_1 T_3}{\sin \angle T_1 T_3 T_2}$$

$$l = \frac{e \cdot \sin \angle T_{24} T_3 T_{26}}{\sin \angle T_3 T_{26} T_{24}}$$

$$f = \frac{l \cdot \sin \angle T_3 T_{24} T_{26}}{\sin \angle T_{24} T_3 T_{26}}$$

$$i = \frac{h \cdot \sin \angle T_{30} T_{26} T_{28}}{\sin \angle T_{26} T_{30} T_{28}}$$

(Basis): $a = 174,52 \checkmark$

$b = 343,55 \checkmark$

$c = 331,96 \checkmark$

$d = 450,45 \checkmark$

$e = 161,54 \checkmark$

$f = 209,44 \checkmark \quad (209,44)$

$g = 171,29 \checkmark$

$h = 622,64 \checkmark$

$i = 612,33 \checkmark$

$k = 398,47 \checkmark$

$l = 150,62 \checkmark$

$s_1 = 268,29 \checkmark$

$s_2 = 268,89 \checkmark$

$s = 268,59 \checkmark$

		Grad	Minuten	Sekunden
$4 T_1 T_2 T_3$	✓	59	12	10 ✓
$4 T_1 T_3 T_2$	✓		52	17 ✓
$4 T_1 T_2 T_{24}$	✓ c	38	27	00 ✓
$4 T_2 T_{24} T_3$	✓	19	05	00 ✓
$4 T_2 T_1 T_{24}$	c ✓	61	19	00 ✓
$4 T_3 T_2 T_{24}$	✓	237	33	00 ✓
$4 T_3 T_{24} T_2$	✓	(122)	27	00)
$4 T_3 T_{24} T_{26}$	✓	20	50	00 ✓
$4 T_3 T_{26} T_{24}$	✓	61	19	00 ✓
$4 T_3 T_{26} T_{28}$	✓	84	12	00 ✓
$4 T_{26} T_{30} T_{28}$	✓	50	07	00 ✓
$4 T_{26} T_{28} T_{30}$	✓	27	09	30 ✓
$4 T_2 T_1 T_3$	✓	33	55	30 ✓
$4 T_2 T_3 T_1$	✓	85	27	30 ✓
$4 T_2 T_3 T_{26}$	✓	15	55	00 ✓
$4 T_2 T_{26} T_3$	✓	94	55	33 ✓
$4 T_2 T_{26} T_{28}$	✓	25	52	17 ✓
$4 T_2 T_{28} T_{30}$	✓	45	41	00 ✓
$4 T_3 T_{26} T_{24}$	✓	50	07	00 ✓
$4 T_{30} T_{26} T_{28}$	✓	79	37	30 ✓
$4 T_{26} T_{28} T_{30}$	✓	15	55	00 ✓