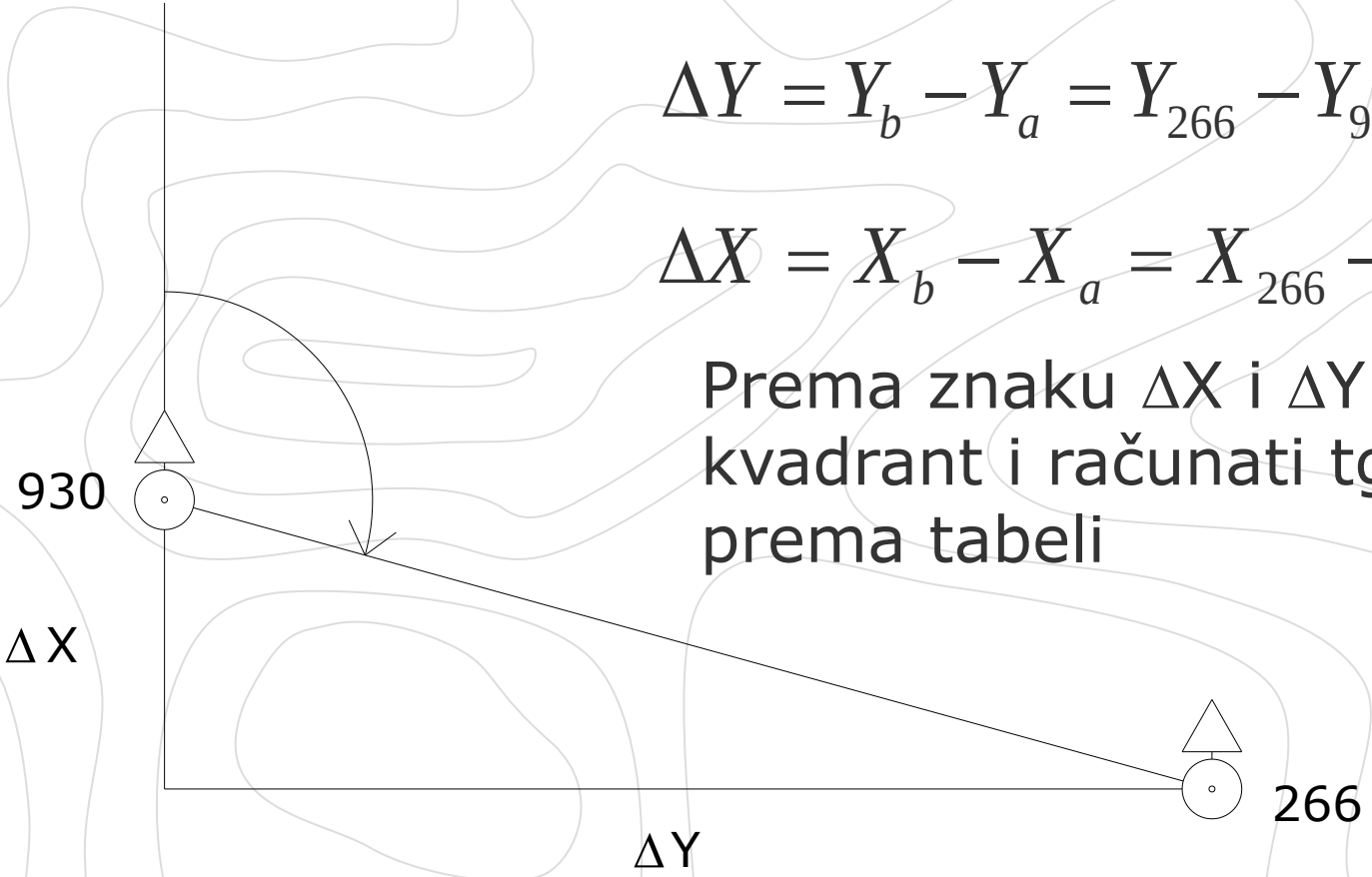
$$\Delta Y = Y_b - Y_a = Y_{266} - Y_{930}$$

$$\Delta X = X_b - X_a = X_{266} - X_{930}$$

Prema znaku ΔX i ΔY odrediti kvadrant i računati tgα prema tabeli



$$tg\alpha = \frac{\Delta Y}{\Delta X} \quad \text{ili} \quad tg\alpha = \left|\frac{\Delta X}{\Delta Y}\right|$$

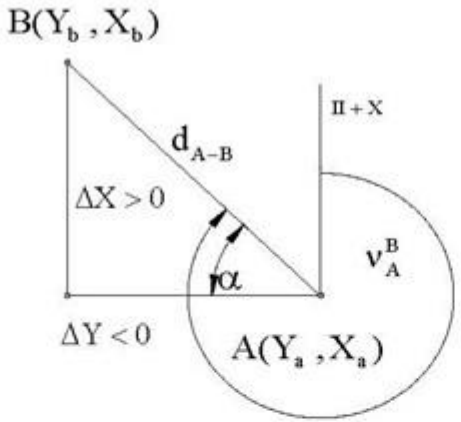
Računanje ν prema tabeli

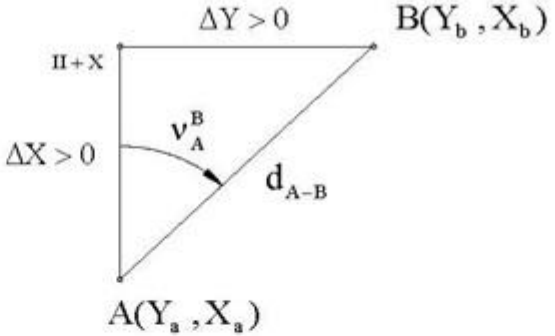
$$\nu_A^B = \alpha + 270°$$

$$tg\alpha = \frac{X_B - X_A}{Y_B - Y_A} = \frac{\Delta X}{\Delta Y}$$

$$\Rightarrow \nu_A^B = arctg\left|\frac{\Delta X}{\Delta Y}\right| + 270°$$

$$d_{A-B} = \sqrt{\Delta Y^2 + \Delta X^2}$$

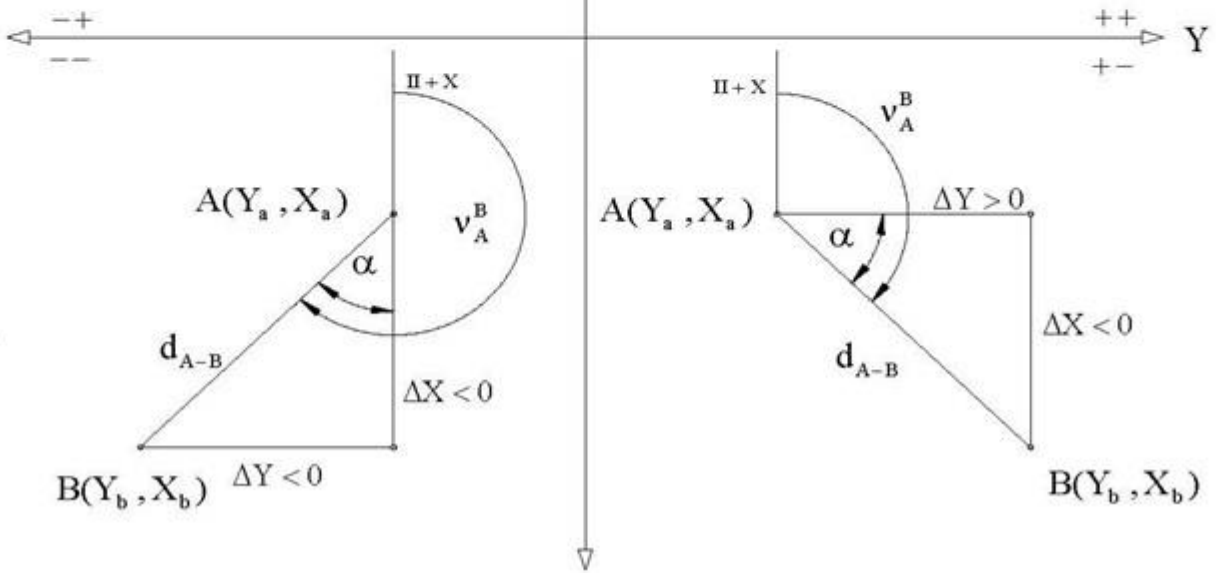




$$tg\nu_A^B = \frac{Y_B - Y_A}{X_B - X_A} = \frac{\Delta Y}{\Delta X}$$

$$\Rightarrow \nu_A^B = arctg\frac{\Delta Y}{\Delta X}$$

$$d_{A-B} = \sqrt{\Delta Y^2 + \Delta X^2}$$



$$\nu_A^B = \alpha + 180°$$

$$tg\alpha = \frac{Y_B - Y_A}{X_B - X_A} = \frac{\Delta Y}{\Delta X}$$

$$\Rightarrow \nu_A^B = arctg\frac{\Delta Y}{\Delta X} + 180°$$

$$d_{A-B} = \sqrt{\Delta Y^2 + \Delta X^2}$$

$$\nu_A^B = \alpha + 90°$$

$$tg\alpha = \frac{X_B - X_A}{Y_B - Y_A} = \frac{\Delta X}{\Delta Y}$$

$$\Rightarrow \nu_A^B = arctg\left|\frac{\Delta X}{\Delta Y}\right| + 90°$$

$$d_{A-B} = \sqrt{\Delta Y^2 + \Delta X^2}$$

kvadrant	ΔY	ΔX	α=arctg	v_a^b =
I	+	+	$\frac{\Delta Y}{\Delta X}$	α
II	+	-	$\left\|\frac{\Delta X}{\Delta Y}\right\|$	$\alpha + 90°$
III	-	-	$\frac{\Delta Y}{\Delta X}$	$\alpha + 180°$
IV	-	+	$\left\|\frac{\Delta X}{\Delta Y}\right\|$	$\alpha + 270°$

Računanje arctg α i ν pomoću digitrona

Casio:

7.69190 [shift] [tan] 82.5927014 [shift] [° ' "] 82°35°34

82°35°34° + 90°0°0°=172°35°34

Obični:

7.69190 [2nf] [tan] 82.5927014 [2nf] [DEG] 82.3534

82.3534 [DEG] 82.5927014 + 90.0000 [DEG] 90

=172.5927014 [2nf] [DEG] 172.3534

Računanje dužine

$$D_{a-b} = \sqrt{\Delta Y^2 + \Delta X^2}$$

Kontrola direkcionog ugla

$$\Delta Y' = \Delta X + \Delta Y$$

$$\Delta X' = \Delta X - \Delta Y$$

Sračunati α' i ν' po tabeli na isti način kao i ν

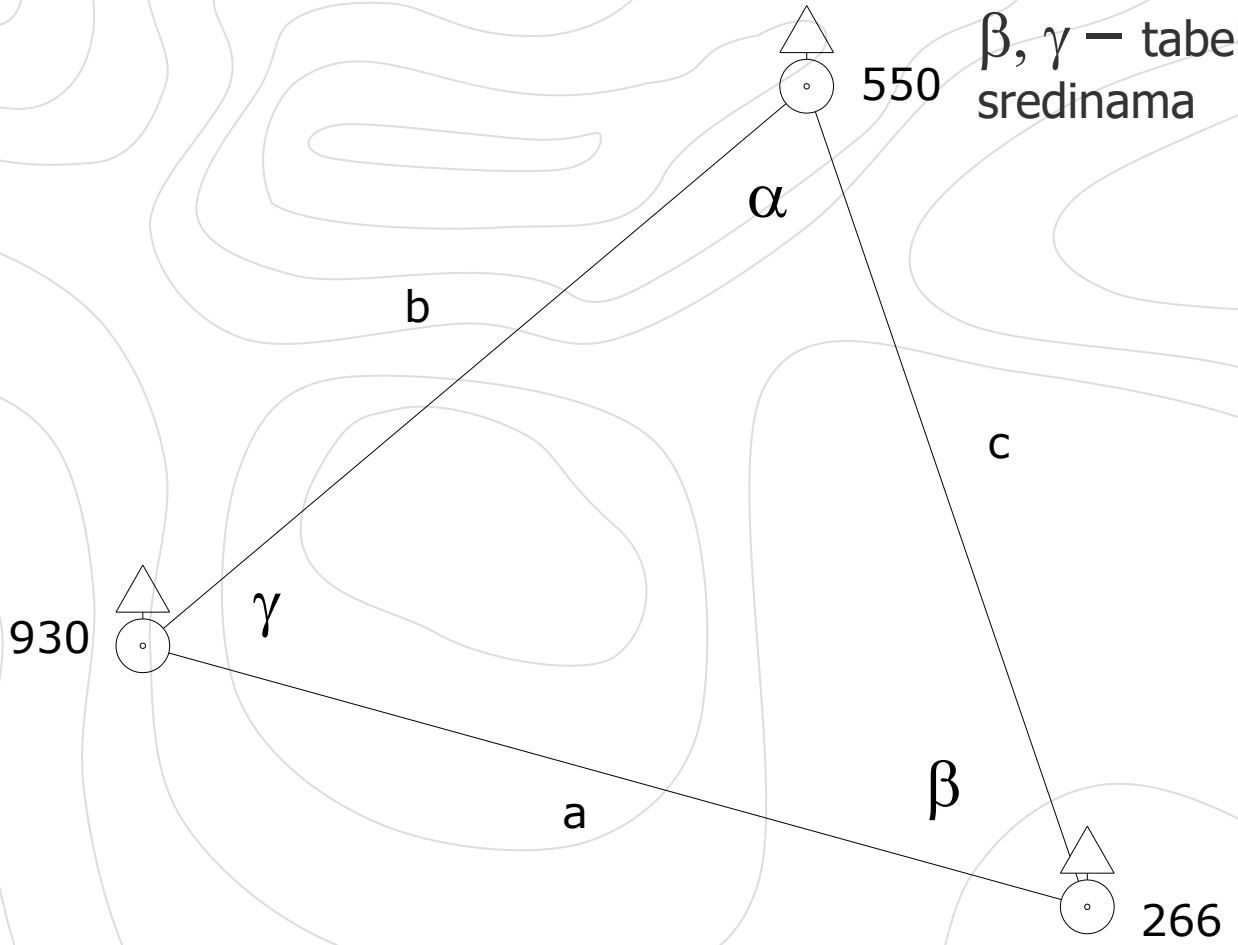
Proveriti da li je $\nu'-\nu=45°$

Kontrola dužine

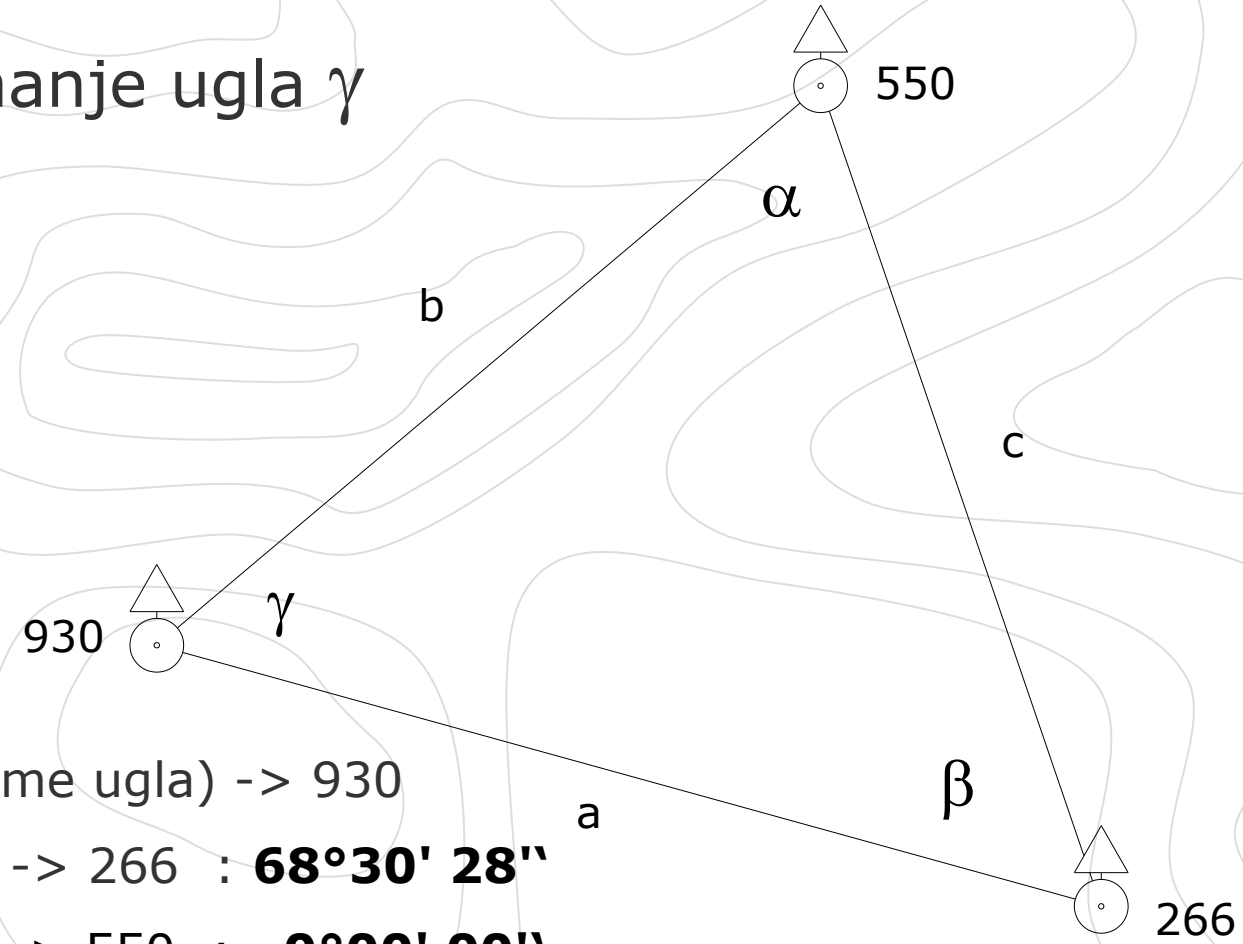
$$D_{a-b} = \frac{\Delta Y}{\sin \nu_a^b} = \frac{\Delta X}{\cos \nu_a^b}$$

a = $D_{930-266}$ - iz koordinata

β, γ – tabela sa redukovanim sredinama



Računanje ugla γ



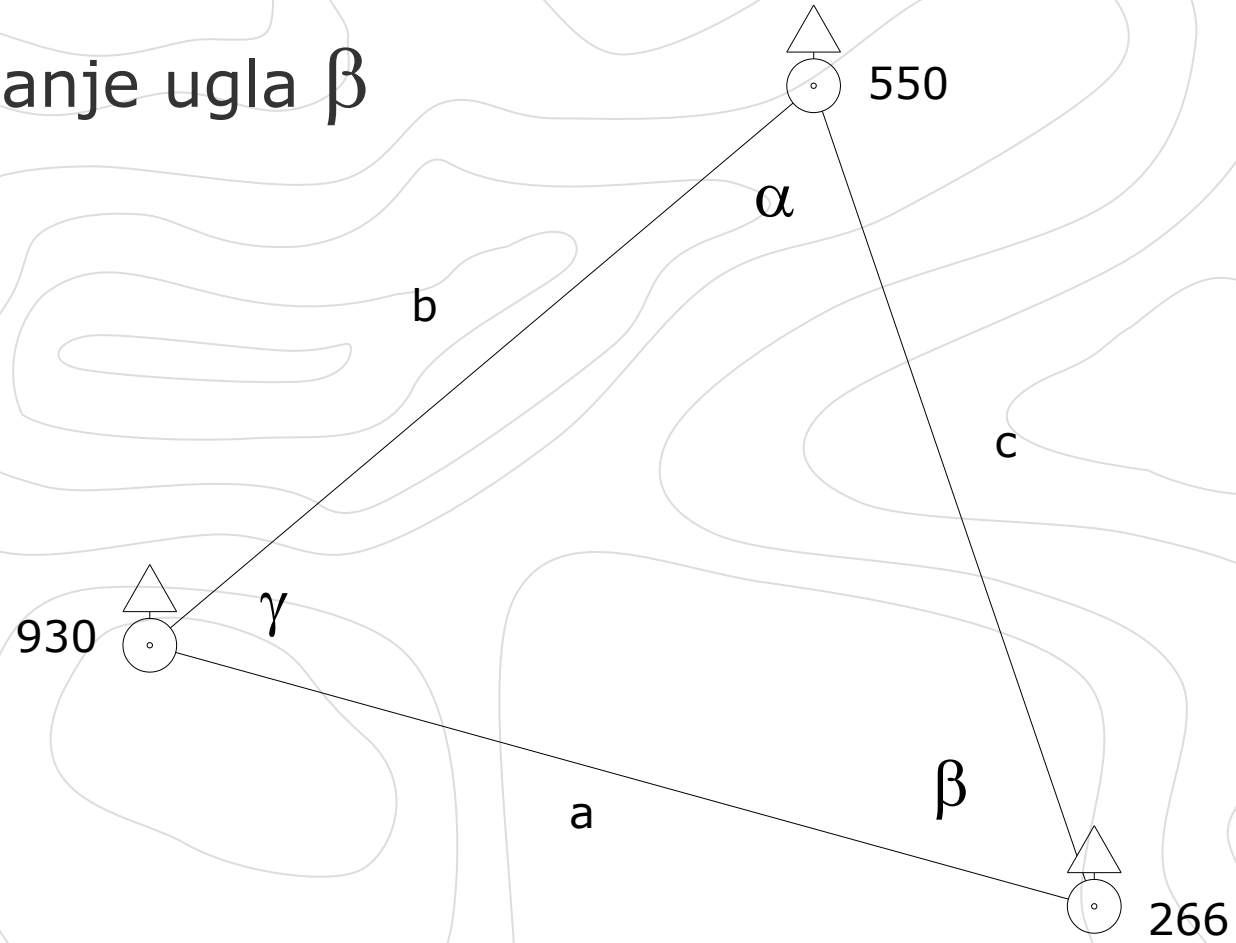
Stanica (teme ugla) -> 930

Desni krak -> 266 : **68°30' 28"**

Levi krak -> 550 : **0°00' 00"**

Desni – Levi = **68°30' 28"**

Računanje ugla β

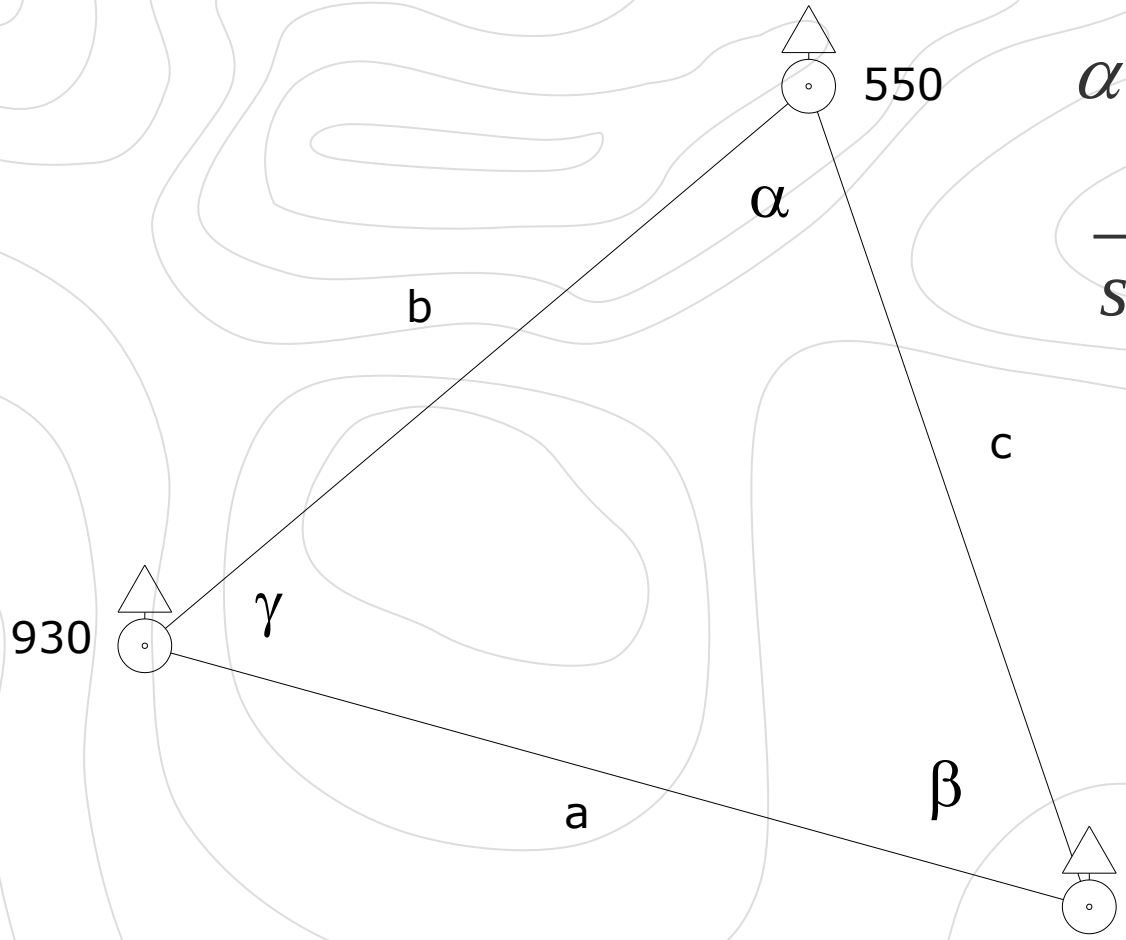


Stanica (teme ugla) -> 266

Desni krak -> 550 : **347°..' .."**

Levi krak -> 930 : **293°..' .."**

Desni – Levi = **53°..' .."**



$$\alpha + \beta + \gamma = 180$$

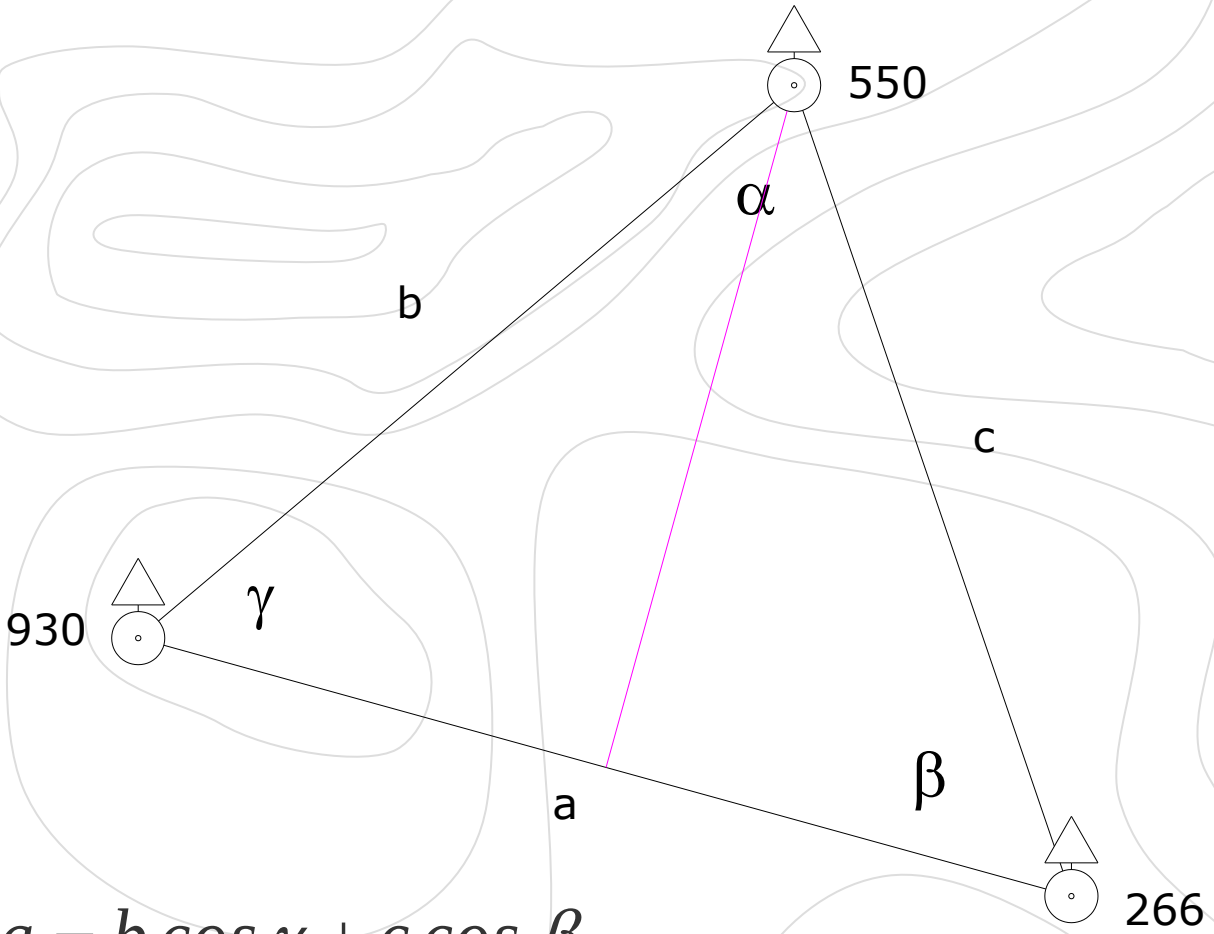
$$\alpha = 180 - (\beta + \gamma)$$

$$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta} = \frac{c}{\sin\gamma}$$

$$c = \frac{a}{\sin\alpha}\sin\gamma$$

$$b = \frac{a}{\sin\alpha}\sin\beta$$

Kontrola



$$a = b\cos\gamma + c\cos\beta$$