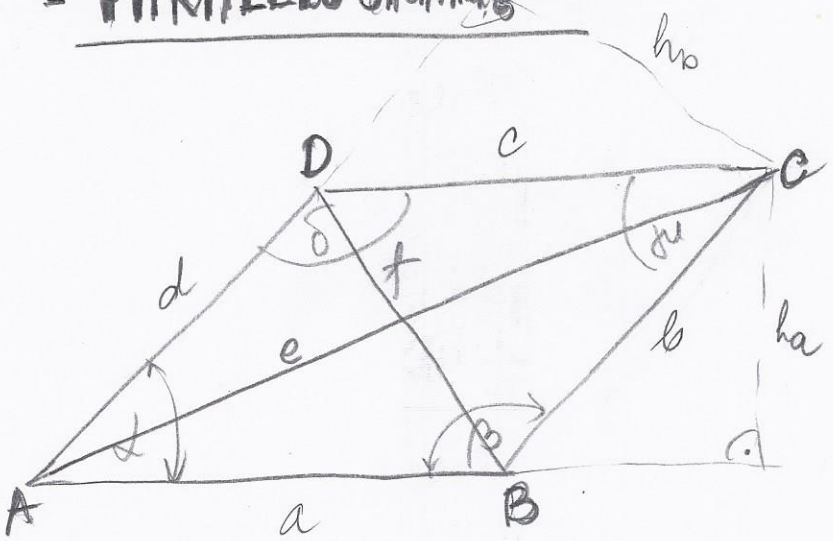
- PARALELOGRAM: -



- KARAKTERISTIKE PARALELOGRAMA:

- paralelne strane su jednake ($a=c$; $b=d$)
- naspramni uglovi su jednaki ($\alpha=\gamma$; $\beta=\delta$)
- uglovi α i β su suplementarni
- visine: $h_a = b\sin\alpha = b\sin\beta$

  $h_b = a\sin\beta = a\sin\beta$

- dijagonale:

$$e = \sqrt{a^2+b^2+2ab\cos\alpha}$$

$$f = \sqrt{a^2+b^2-2ab\cos\alpha}$$

- Površina:

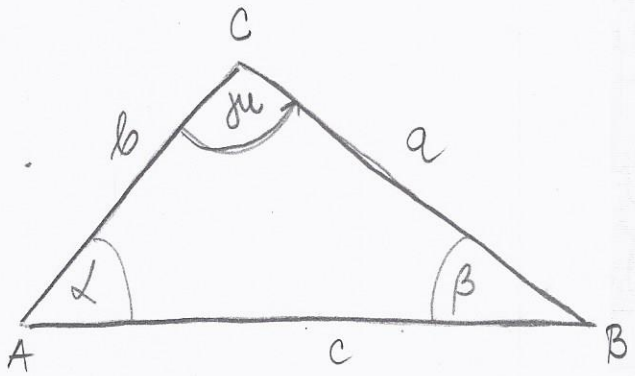
$$S = a\cdot h_a = b\cdot h_b$$

$$S = a\cdot b\cdot\sin\alpha = a\cdot b\cdot\sin\beta = \frac{1}{2}e\cdot f\cdot\sin\theta$$

- Zakon paralelograma:

$$e^2+f^2 = 2(a^2+b^2)$$

SINUSNA TEOREMA KOD TROUGLA

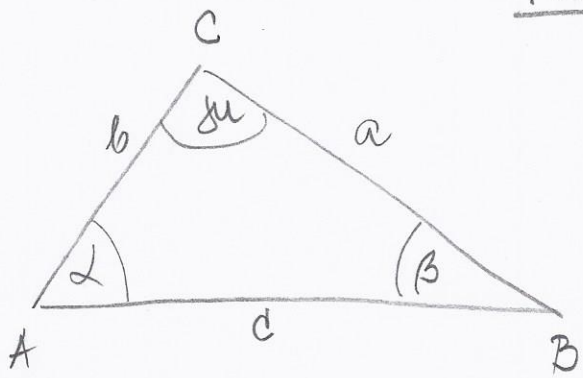


PRIMENA:

- Kada su data dva ugla i jedna stranica
- kada su date 2 stranice i ugao nasprama jedne od njih

$$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta} = \frac{c}{\sin\gamma} = 2r \rightarrow 2r$$ - precnik kruznice opisane oko trougla

KOSINUSNA TEOREMA KOD TROUGLA



PRIMENA:

- kada su date dve stranice i ugao izmedu njih
- kada su date sve tri stranice trougla,

$$a^2 = b^2 + c^2 - 2ab\cos\alpha$$
$$b^2 = a^2 + c^2 - 2ac\cos\beta$$
$$c^2 = a^2 + b^2 - 2ab\cos\gamma$$

VREDNOSTI TRIGONOMETRIJSKIH F-JA

Tip	0 [0]	30° [π/6]	45° [π/4]	60° [π/3]	90° [π/2]	180° [π]	270° [3π/2]
sin	0	1/2	$\sqrt{2}/2$	$\frac{\sqrt{3}}{2}$	1	0	−1
cos	1	$\sqrt{3}/2$	$\sqrt{2}/2$	1/2	0	−1	0
tg	0	$\sqrt{3}/3$	1	$\sqrt{3}$	$\pm\infty$	0	$\pm\infty$
ctg	$\pm\infty$	$\sqrt{3}$	1	$\sqrt{3}/3$	0	$\pm\infty$	0