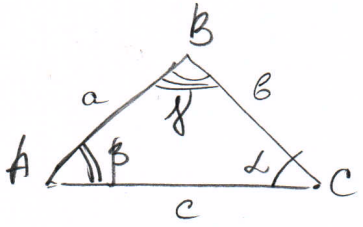
Zadara 1



$a = 2$; $b = 3$; $c = 4$

$\cos\alpha = \frac{a^2 + c^2 - b^2}{2ac} =$

$= \frac{2^2 + 4^2 - 3^2}{2 \cdot 2 \cdot 4} = 0,6875$

$\alpha = \arccos 0,6875 = 46,6°$

$\cos\gamma = \frac{b^2 + c^2 - a^2}{2 \cdot cb} =$

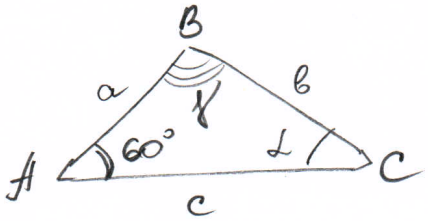
$= \frac{3^2 + 4^2 - 2^2}{2 \cdot 4 \cdot 3} = 0,875$

$\gamma = \arccos 0,875 = 29°$

$\beta = 180° - \alpha - \gamma =$

$= 180° - 46,6° - 29° = 104,4°$

Zadara 2



$a = 12$, $c = 8$, $\angle\beta = 60°$

$b = \sqrt{a^2 + c^2 - 2ac\cos\beta} =$

$= \sqrt{12^2 + 8^2 - 2 \cdot 12 \cdot 8 \cdot \cos 60°} =$

$= 10,6$

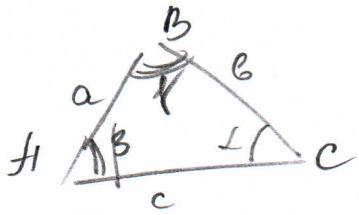
$\cos\alpha = \frac{a^2 + c^2 - b^2}{2ac} =$

$= \frac{12^2 + 8^2 - 10,6^2}{2 \cdot 10,8} = 0,4981$

$\alpha = \arccos 0,4981 = 60,1°$

$\gamma = 180° - \beta - \alpha = 180° - 60° - 60,1° = 59,9°$

Zadara 3



$c = 6$, $b = 12$, $\angle\gamma = 30°$

$b = \frac{c \sin\beta}{\sin\gamma} \Rightarrow \sin\beta = \frac{b \sin\gamma}{c} =$

$= \frac{12 \cdot \sin 30°}{6} = 1$

$\angle\beta = 90°$

$\angle\alpha = 180° - \gamma - \beta =$

$= 180° - 30° - 90° = 60°$

$a = \sqrt{b^2 + c^2 - 2bc\cos\alpha} =$

$= \sqrt{12^2 + 6^2 - 2 \cdot 12 \cdot 6 \cdot \cos 60°} =$

$= 10,4$