Zadatak 38. Koliki su kutovi trokuta $\triangle ABC$ ako je $a = 3.5$ cm, $b = 2$ cm, $t_c = 2.2$ cm?

Rješenje.

$a = 3.5\,\text{cm}$

$b = 2\,\text{cm}$

$t_c = 2.2\,\text{cm}$

$\alpha,\ \beta,\ \gamma = ?$

$c^2 = 2a^2 + 2b^2 - 4t_c^2 = 13.14\,\text{cm}^2 \implies c = 3.624914$

$\cos\gamma = \dfrac{a^2 + b^2 - c^2}{2ab} = \ = 0.222142857 \implies \gamma = 77°10'$

$\sin\alpha = \dfrac{a \cdot \sin\gamma}{c} = 0.941421 \implies \alpha = 70°18'28''$

$\beta = 180° - \alpha - \gamma = 32°32'$