

**Zadatak 3.** Izračunaj duljinu stranice  $c$  trokuta  $\triangle ABC$  ako je  $a = 7.8$  cm,  $\alpha = 72^\circ 36'$ ,  $\beta = 55^\circ 12'$ .

**Rješenje.**

$$a = 7.8\text{cm}$$

$$\alpha = 72^\circ 36'$$

$$\beta = 55^\circ 12'$$

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$$b, c = ?$$

$$b = \frac{a \cdot \sin \beta}{\sin \alpha} = \frac{7.8 \cdot \sin 55^\circ 12'}{\sin 72^\circ 36'} = 6.712\text{cm}$$

$$\gamma = 180^\circ - \alpha - \beta = 180^\circ - 72^\circ 36' - 55^\circ 12' = 52^\circ 12'$$

$$c^2 = a^2 + b^2 - 2ab \cos \gamma = 7.8^2 + 6.7^2 - 2 \cdot 7.8 \cdot 6.7 \cdot \cos 52^\circ 12' = 41.66896\text{cm}^2$$

$$c = 6.46\text{cm}.$$