

Zadatak 19. Omjer duljina visina v_a i v_b na stranice a i b trokuta $\triangle ABC$ jednak je $5 : 7$, a $\alpha = 66^\circ$. Koliki su ostali kutovi trokuta?

Rješenje.

$$v_a : v_b = 5 : 7$$

$$\alpha = 66^\circ$$

$$\beta, \gamma = ?$$

$$v_a \cdot a = v_b \cdot b \implies \frac{v_a}{v_b} = \frac{b}{a} = \frac{5}{7}$$

$$b = \frac{5}{7}a$$

$$\sin \beta = \frac{b \cdot \sin \alpha}{a} = \frac{\frac{5}{7}a \cdot \sin 66^\circ}{a}$$

$$\beta = 40^\circ 43' 58''$$

$$\gamma = 180^\circ - (\alpha + \beta) = 73^\circ 16' 2''$$