

**Zadatak 16.** Trokut  $\triangle ABC$  zadan je sa  $a = 18$  cm,  $b = 20$  cm,  $v_b = 11$  cm. Kolika je duljina treće stranice trokuta?

**Rješenje.**

$$a = 18 \text{ cm}$$

$$b = 21 \text{ cm}$$

$$v_b = 11 \text{ cm}$$

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$$c = ?$$

$$\sin \gamma = \frac{v_b}{a} = \frac{11}{18}$$

$$\cos \gamma = \sqrt{1 - \left(\frac{11}{18}\right)^2} = \pm 0.79154$$

$$c_1^2 = a^2 + b^2 - 2ab \cos \gamma = 324 + 441 - 2 \cdot 18 \cdot 21 \cdot 0.79154 = 166.6, \quad c_1 = 12.91 \text{ cm}$$

$$c_2^2 = a^2 + b^2 + 2ab \cos \gamma = 324 + 441 + 2 \cdot 18 \cdot 21 \cdot 0.79154 = 1363.4, \quad c_2 = 36.92 \text{ cm}$$

