

Zadatak 6. Mjere unutarnjih kutova trokuta u omjeru su $4 : 5 : 6$. Koliki su ti kutovi? Odredi mjere vanjskih kutova tog trokuta.

Rješenje.

$$\alpha + \beta + \gamma = 180^\circ$$

$$\alpha : \beta : \gamma = 4 : 5 : 6 \implies \alpha = 4x, \beta = 5x, \gamma = 6x$$

$$4x + 5x + 6x = 180^\circ$$

$$15x = 180^\circ / : 15$$

$$x = 12^\circ$$

$$\implies \alpha = 48^\circ, \beta = 60^\circ, \gamma = 72^\circ$$

$$\alpha' = 180^\circ - \alpha = 180^\circ - 48^\circ = 132^\circ$$

$$\beta' = 180^\circ - \beta = 180^\circ - 60^\circ = 120^\circ$$

$$\gamma' = 180^\circ - \gamma = 180^\circ - 72^\circ = 108^\circ$$

$$\alpha' : \beta' : \gamma' = 132 : 120 : 108 / : 12$$

$$\alpha' : \beta' : \gamma' = 11 : 10 : 9.$$