

**Zadatak 5.** Ako je  $\operatorname{tg} \alpha = \frac{4}{7}$ ,  $\pi < \alpha < \frac{3\pi}{2}$ , izračunaj  $\operatorname{ctg} 2\alpha$ .

*Rješenje.*

$$\operatorname{ctg} \alpha = \frac{1}{\operatorname{tg} \alpha} = \frac{1}{\frac{4}{7}} = \frac{7}{4}$$

$$\operatorname{ctg} 2\alpha = \frac{\operatorname{ctg}^2 \alpha - 1}{2 \operatorname{ctg} \alpha} = \frac{\frac{49}{16} - 1}{2 \cdot \frac{7}{4}} = \frac{\frac{33}{16}}{\frac{7}{2}} = \frac{33}{56}.$$