

**Zadatak 24.** Ako je  $\cos(-x) = -\frac{4}{5}$ ,  $5\pi < x < \frac{11\pi}{2}$ , koliko je  $\operatorname{ctg} x$ ?

**Rješenje.**  $5\pi < x < \frac{11\pi}{2} \implies x \in \left\langle \pi, \frac{3\pi}{2} \right\rangle$  (III. kvadrant  $\cos x, \sin x < 0$ ,  $\operatorname{ctg} x > 0$ )

$$\cos x = \cos(-x) = -\frac{4}{5}$$

$$\sin x = -\sqrt{1 - \cos^2 x} = -\sqrt{1 - \frac{16}{25}} = -\sqrt{\frac{9}{25}} = -\frac{3}{5}$$

$$\operatorname{ctg} x = \frac{\cos x}{\sin x} = \frac{4}{3}.$$