

Zadatak 23. Ako je $\sin(-x) = -\frac{\sqrt{3}}{2}$, $-\frac{3\pi}{2} < x < -\pi$, koliko je $\operatorname{tg} x$?

Rješenje. $-\frac{3\pi}{2} + 2\pi < x < -\pi + 2\pi \implies \frac{\pi}{2} < x < \pi$ (II. kvadrant $\cos x < 0$, $\operatorname{tg} x < 0$)

$$\sin x = -\sin(-x) = \frac{\sqrt{3}}{2}$$

$$\cos x = -\sqrt{1 - \sin^2 x} = -\sqrt{1 - \frac{3}{4}} = -\sqrt{\frac{1}{4}} = -\frac{1}{2}$$

$$\operatorname{tg} x = \frac{\sin x}{\cos x} = -\sqrt{3}.$$