

Zadatak 5. Napiši jednađbu tangente na krivulju $y = \frac{1}{\sqrt{\sin x}}$ u njezinoj točki s apscisom $x_0 = \frac{\pi}{2}$.

Rješenje. $y\left(\frac{\pi}{2}\right) = \frac{1}{\sqrt{\sin \frac{\pi}{2}}} = 1$; $y' = -\frac{1}{2\sqrt{\sin^3 x}} \cdot \cos x \implies y'\left(\frac{\pi}{2}\right) = -\frac{1}{2\sqrt{\sin^3 \frac{\pi}{2}}}$.
 $\cos \frac{\pi}{2} = 0$. Jednađba tangente glasi $y - 1 = 0$.