Zadatak 16. Ako je $\sin x \cdot \cos x = \frac{1}{4}$, $x \in \langle \pi, \frac{3\pi}{2} \rangle$, koliko je $\sin x + \cos x$?

Rješenje. $x \in \langle \pi, \frac{3\pi}{2} \rangle \implies \sin x < 0,\ \cos x < 0;$

$$(\sin x + \cos x)^2 = \sin^2 x + 2 \sin x \cos x + \cos^2 x = 1 + 2 \sin x \cos x = 1 + 2 \cdot \frac{1}{4} = \frac{3}{2}$$

$(\sin x < 0,\ \cos x < 0)$

$$\implies \sin x + \cos x = -\sqrt{\frac{3}{2}}$$