

Zadatak 7. Koliko je $f\left(\frac{1}{1-\sqrt{2}}\right)$ ako je
 $f(x) = x^2 + 2x + 1$?

Rješenje. $f(x) = x^2 + 2x + 1 = (x + 1)^2$,

$$\begin{aligned} f\left(\frac{1}{1-\sqrt{2}}\right) &= \left(\frac{1}{1-\sqrt{2}} + 1\right)^2 = \left(\frac{1+1-\sqrt{2}}{1-\sqrt{2}}\right)^2 = \left(\frac{2-\sqrt{2}}{1-\sqrt{2}} \cdot \frac{1+\sqrt{2}}{1+\sqrt{2}}\right)^2 \\ &= \left(\frac{2-\sqrt{2}+2\sqrt{2}-2}{1-2}\right)^2 = (-\sqrt{2})^2 = 2. \end{aligned}$$