Zadatak 12. Koliko je $f(x_0)$, $x_0 = (2+3^{\frac{1}{2}})^{-\frac{1}{2}}$ ako je $f(x) = x^4 - 4x^2 + 3$?

Rješenje. $$x_0 = \frac{1}{\sqrt{2+\sqrt{3}}} \cdot \frac{\sqrt{2-\sqrt{3}}}{\sqrt{2-\sqrt{3}}} = \frac{\sqrt{2-\sqrt{3}}}{\sqrt{4-3}} = \sqrt{2-\sqrt{3}},$$

$$f(x_0) = (2-\sqrt{3})^2 - 4(2-\sqrt{3}) + 3 = 7 - 4\sqrt{3} - 8 + 4\sqrt{3} + 3 = 2.$$