Zadatak 10. Ako je $f(x) = \dfrac{x(x+1)(x+2)(x+3)}{(x-1)(x+4)}$,
izračunaj $f\left(\dfrac{\sqrt{5}-3}{2}\right)$.

Rješenje. $f(x) = \dfrac{x(x+1)(x+2)(x+3)}{(x-1)(x+4)}$,

$$f\left(\frac{\sqrt{5}-3}{2}\right) = \frac{\frac{\sqrt{5}-3}{2}\cdot\frac{\sqrt{5}-1}{2}\cdot\frac{\sqrt{5}+1}{2}\cdot\frac{\sqrt{5}+3}{2}}{\frac{\sqrt{5}-5}{2}\cdot\frac{\sqrt{5}+5}{2}} = \frac{(5-1)(5-9)}{4(5-25)}$$

$$= \frac{16}{80} = \frac{1}{5}.$$