

**Zadatak 9.** Ako je  $f(x) = \frac{x(x+1)(x-2)(x-3)}{(x-1)(x+2)}$ , koliko je  $f(1-\sqrt{3})$ ?

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

$$\begin{aligned} f(1-\sqrt{3}) &= \frac{(1-\sqrt{3})(2-\sqrt{3})(-1-\sqrt{3})(-2-\sqrt{3})}{-\sqrt{3}(3-\sqrt{3})} = \frac{(1-\sqrt{3})(1+\sqrt{3})(2-\sqrt{3})(2+\sqrt{3})}{3(1-\sqrt{3})} \\ &= \frac{1+\sqrt{3}}{3}(4-3) = \frac{1+\sqrt{3}}{3}. \end{aligned}$$