

CP.1.3.2, Sauer3

Let $f(x) = \sin(x^3) - x^3$. (a) Find the multiplicity of the root $r = 0$. (b) Use `scipy.optimize.fsolve` command with initial guess $x = 0.1$ to locate a root. What are the forward and backward errors of `scipy.optimize.fsolve`'s response?