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CP.1.4.13, Sauer3

For the function

$$f(x) = \left(1 - \frac{3}{4x}\right)^{\frac{1}{3}}$$

- a. Find the root of the function.
- b. Apply Newton's Method using an initial guess near the root and plot the first 50 iterates. This is another way Newton's Method can fail, by producing a chaotic trajectory.
- c. Why are Theorems 1.11 and 1.12 not applicable?