

Hints exercise 3

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Pen and Paper

Problem 1

- Formulate Newtons method based on the example and the learned formula
- Find the necessary functions and plug in the values

Problem 2

$$\lim_{k \rightarrow \infty} \frac{|E^{(k+1)}|}{|E^{(k)}|^2} = C$$

Problem 3

- Formulate the update formulas for each case

Problem 4

- Apply formulas for the multidimensional case

Coding

Problem 1

- If unclear check the script for the update formulas

Problem 2

- Formulate the function for $p(r)$
- Good initial guesses are 80,10,1