

Numerical Optimization 2024 - Homework 9

Deadline: Wednesday, May 29, 15:30.

Question of the week: If there is no nonzero critical direction, does it mean that the second-order sufficient conditions are satisfied or violated?

Problem 1. Exercise 12.19 from the book ((a)-(d)).

Problem 2. Exercise 12.20 from the book (minima over the unit circle). Use second-order conditions to justify your answer.

Problem 3. Exercise 12.21 from the book (maxima over the unit disk). Use second-order conditions to justify your answer.