

WQD7011 Numerical Optimization

Exercise 3 (Week 5 – Line Search Part II)

1. Explain the general steps in step-size searching.
2. Explain *sufficient decrease condition*.
3. Differentiate between exact line search and inexact line search.
4. What is the main purpose of having multiple conditions (e.g., Armijo, curvature, etc.) in step size searching?
5. *The more conditions we add into the step size searching algorithm, the lesser possible candidates for step size searching.* Do you agree with this statement? Justify your answer.