Classical Numerical Analysis

Numerical analysis is a broad field, and coming to grips with all of it may seem like a daunting task. This text provides a thorough and comprehensive exposition of all the topics contained in a classical graduate sequence in numerical analysis. With an emphasis on theory and connections with linear algebra and analysis, the book shows all the rigor of numerical analysis. Its high level and exhaustive coverage will prepare students for research in the field and will become a valuable reference as they continue their career. Students will appreciate the simple notation and clear assumptions and arguments, as well as the many examples and classroom-tested exercises ranging from simple verification to qualifying exam-level problems. In addition to the many examples with hand calculations, readers will also be able to translate theory into practical computational codes by running sample MATLAB codes as they try out new concepts.

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A Comprehensive Course

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