Numerical Analysis – MATH 270 A/B/C

Topics for 2025 Qualifying Exam

270A:

James Demmel's "Applied Numerical Linear Algebra", chapters 1, (2.1-2.6), (2.7.1-2.7.3), 3, (4.1-4.4), (5.1-2), 5.3.1, 5.4.1, (6.5-6)

270B

Atkinson and Han, Theoretical Numerical Analysis, Section 3.1

Kincaid and Cheney: Mathematics of Scientific Computing (Third Edition), Sections 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.8, 6.9

270C

Iserles, A First Course in Numerical Analysis of Differential Equations, Chapters 1-4