

Waiver Examination Topics

CAPP 30271 Mathematics for Computer Science and Data Analysis

Suggested Reference textbook. “Linear algebra and its applications” by David C. Lay, Steven R. Lay, and Judi J. McDonald, 5th edition.

List of topics. The problems in the waiver examination will be from the following topics. The section numbers refer to the Lay textbook. Problems may include hand calculations (no electronic devices allowed) and writing proofs.

- Linear equations: 1.1–1.9.
- Matrix Inverse 2.1–2.3.
- Determinants 3.1–3.2.
- Vector Spaces 4.1–4.7.
- Eigenvalues 5.1–5.3.
- Orthogonal Projections and Least Squares 6.1–6.5
- Symmetric Matrices and SVD 7.1–7.5.