

NO CALCULATORS**• Part I : Calculations. 80 %**

In addition to chapters 1, 4, and 5 we have covered: 9.3, 8.4, and 8.6. Material in 3.1, 3.2 and 3.6 was covered in lecture. There were handouts on determinants and vector spaces. The former was used instead of Chapter 2. Section 4.9 was skipped.

All material covered in lecture is fair game for the final.

• Part II: Theory. 20 %

- Know basic definitions: linear independence, rank, eigenvalue, basis of a vector space, row operations, etc.
- Know how to prove the following: Theorem 1.1 on page 35; Theorem 1.9 on pages 71-72; Theorem 4.2 on page 205 (proved in class); Theorem 4.5 on pages 226-227; Theorem 5.3 on page 300; Theorem 8.7 on page 451.
- Know how to do the following: 1.2 T4; 1.4 T8; 1.6 T2; Chapter 1 supplementary T4; 4.3 T4; 5.1 T12.
- There will be one surprise theory problem.