Part 1: Reading

1. (By Tuesday, 9/1) Read Section 2.1 (p. 112-117) and Section 2.2 (p. 119-129)

2. *For each of the following types of matrix, give two examples and two non-examples (for instance, write down two square matrices and two matrices which are not square): i) square, ii) upper triangular, iii) lower triangular, iv) unit upper triangular, v) unit lower triangular, vi) diagonal, vii) symmetric, viii) skew-symmetric.

3. (By Thursday, 9/3) Read Section 2.3 (p. 133-138) and Section 2.4 (p. 139-148).

4. Read Section 2.5 (p. 150-158) and Section 2.6 (p. 162-169),

5. *Pick one of the most important theorems or formulas from these sections. Define all of the variables and terms that appear in your statement. Write a sentence in plain English summarizing the theorem or formula

Part 2: Definitions and Calculations

3. Answer T/F questions 2.1.7, 2.1.9, 2.2.5.

4. *Answer T/F questions 2.1.10 and 2.2.6, including an example justifying your answer.

5. 2.1.7, 2.1.8, 2.1.11, *2.1.12, 2.1.13

6. 2.2.4, 2.2.5, *2.2.6, 2.2.9, 2.2.13, *2.2.19, 2.2.27, 2.2.37,

Part 3: Problems

1. *Solve problem 2.1.21

2. *Solve problem 2.2.16