Math 240, Homework 2, Due 9/15
Remember to include your name and your TA’s name clearly on the upper right corner of your homework. You must staple your homework if it is more than one sheet of paper. Turn in only the *’d items. Work must be written clearly and in order to receive full credit.

Part 1: Reading
1. (By Thursday, 9/10) Read Section 3.1 (p. 189-197), and most of Section 3.2 (p. 200-206; you don’t need to read ‘Proofs of the Properties of Determinants’)
2. *Give two examples of even permutations and two examples of odd permutations
3. Read Section 4.2 (p. 240-248)
4. *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 2.3.4, 2.3.5, 2.4.3, 2.6.4, 2.6.10
4. *Answer T/F questions 2.3.6, 2.4.4, 2.5.2, 2.6.7. Give either an example or a justification (i.e. a short proof) for your answer.
5. Do problems
   • 2.3.2, *2.3.3, 2.3.7, *2.3.8, 2.3.9
   • 2.4.3, 2.4.7, *2.4.8, 2.4.11, 2.4.13, *2.4.16, 2.4.19, *2.4.22
   • 2.5.3, *2.5.4, *2.5.10, 2.5.11, *2.5.16, 2.5.17, 2.5.35, *2.5.40, 2.5.49, *2.5.52
   • 2.6.9, *2.6.12, *2.6.18,

Part 3: Problems
1. *Solve problem 2.5.22
2. *Solve problem 2.6.31