Assignment 12 (8/18)

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This homework is due in class on Monday, 8/21. You may cite results from class as appropriate. Unless otherwise stated, you must provide a complete explanation for your solutions, not simply an answer. You are encouraged to work together on these problems, but you must write up your solutions independently.

You are encouraged to think about the problems marked with a $(\star)$ *if you have time, but you don't need to hand them in.*

Remember that you can always use the result of the previous assignment problems without proof to solve the new assignment problems.

Problem 0$\star$

Read section 6.3 and starting of 7.1. Note that we have skipped the discussion on adjoint of a matrix for now. We will continue with 7.1 in next class as well.

Problem $\epsilon\star$

Work out the True/False problems at the end of chapter 6.

Problem $\delta\star$

Make sure that you can solve all the problems from all 4 quizzes. I have uploaded them in the webpage as well.

Problem 1

Problems 6.3.$(2, 11, 22, 24, 27)$.

Problem 2

Problems 6.2.$(17, 20, 24)$. Note that it doesn't matter what basis you pick to calculate the matrix of the linear transformation.