

Linear Algebra (MATH 3333) Fall 2007 Sections 1/4

Homework 9

Due: Fri. Oct. 19, start of class

Instructions: You may **not** use a calculator (or computer). Make sure to write your name, course and section numbers in the top right corner of your solution set, as well as the assignment number on top.

Reading

Section 2.2: Examples 2, 3 and 5

Section 4.6

Conceptual Questions

1. What is a basis?
2. Why did we *define* dimension in terms of basis?

Written Assignment

18 points

Section 2.2 (p. 114): 7 (4 pts)

Section 4.6 (p. 242–243): 1, 2, 4(a)(b), 19, 31 (2 pts each, you need not show your work for #1 and #2)

Section 4.8 (p. 267): 1, 3, 7, 9 (1 pt each, you need not show your work)

Bonus 1. #45, p. 244.

Bonus 2. #44, p. 244.