

Math 215 HW #7

Due 5:00 PM Thursday, March 25

Reading: Sections 3.3–3.4 from Strang’s *Linear Algebra and its Applications*, 4th edition.

Problems: Please follow the guidelines for collaboration detailed in the course syllabus.

1. Problem 3.3.8.
2. Problem 3.3.12.
3. Problem 3.3.22.
4. Problem 3.3.24.
5. Problem 3.3.25. For extra credit, actually determine the best-fit parabola.
6. Problem 3.4.4.
7. Problem 3.4.6.
8. Problem 3.4.12.
9. Problem 3.4.18.
10. Problem 3.4.32.
11. (**Bonus Problem**) Problem 3.4.24. The Legendre polynomials are discussed on pp. 184–5.