Math 215 HW #5

Due 5:00 PM Thursday, February 25

Reading: Sections 2.3–2.4, 2.6 from Strang's *Linear Algebra and its Applications*, 4$^{\text{th}}$ edition.

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

1. Problem 2.3.6.

2. Problem 2.3.10.

3. Problem 2.3.26. If true say why; if false give a counterexample.

4. Problem 2.3.38.

5. Problem 2.4.10.

6. Problem 2.4.28. The second part of the problem is asking why you can't construct a matrix which has $(1, 0, 1)$ and $(1, 2, 0)$ as a basis for its row space and its nullspace.

7. Problem 2.4.32.

8. Problem 2.6.6.

9. Problem 2.6.14.

10. Problem 2.6.22.