Math 225: Linear Algebra

Fall 2024 Instructor: Sam DeHority
Proofs

- Math 225 is a proof-based course
- What is a proof?
Conjectures: things we think are true, but have not yet proved

Proofs: the logical cement that holds it all together

Conj.

Thm

Thm

Thm

Thm

Def

Def

Def

Def

Theorems: facts that are proved with logic

Definitions: naming things we care about

Axioms: the foundation of things we assert are true without proof
Objectives

- Computational techniques
- Conceptual knowledge, understanding and producing proofs
- Mathematical communication
Resources:

- Professor office hours
- TA office hours
- ULA study group sessions
- ULA proof writing workshops
Course Structure

- The two sections of Math 225 will be closely coordinated
  - Shared homework sets
  - Shared exams
  - Shared TAs and ULAs
  - Closely matched pacing

- Math 225 and 226 will be paced similarly, so that switching from 226 to 225 is possible
Course Structure

- Textbook: Linear Algebra by Friedberg, Insel, and Spence
- MWF lectures
- Approximately weekly homework sets
- 2 midterms and a final
- Grading: Your final grade will be based on the higher of the two following scores
  - 30% Homework, 20% Midterm 1, 20% Midterm 2, 30% Final Exam
  - 30% Homework, 20% MAX( Midterm 1, Midterm 2), 50% Final Exam
Questions?