

MATH 253

Today

1. Review
2. WeBWorK

Review

1. Systems of equations
2. Matrices
 - (a) Coefficient and augmented matrices of systems
 - (b) Operations and properties
 - (c) Row operations
 - (d) Elementary row matrices
 - (e) RREF
3. Homogeneous systems
 - (a) Nullspace
 - (b) $X = X_p + X_h$
4. Stochastic matrices (transition matrices)
5. Vector spaces
 - (a) Definition
 - (b) Examples
 - (c) Deciding whether a given candidate is a vector space
6. Logistics:
 - (a) We can start 5 minutes early and run 5 minutes late (7:55-9:05).
 - (b) The exam is intended to be a 50-minute exam.
 - (c) There will be one or two (short) proofs. The rest will be computational or conceptual

- (d) You may use Python or a calculator, but I will ask you explicitly to perform some computations by hand.
- (e) You may load our exam template (I will share it with you), and you may use our Python info sheet.
- (f) Problems will be on one page. I will provide blank paper for you to work on. Please leave the upper left corner blank (for a staple) and write on only one side of the page.

Questions

Next Time

1. Exam
2. 2.4 Friday