

MA 341 Exam #1 Review

Exam #1 will be on Wednesday, September 24, in class.

1. Read and review the “Summary of Class” from the course website through Friday, September 19.
2. Read and review the relevant sections of the “Course Notes” from the course website—see below. You are not responsible for the material that we did not cover.
3. Read and review all of the homework problems, including solutions posted on the course website.
4. In particular be able to do the following, and problems similar to the following. I may directly ask some questions just like these, but I may also ask related questions that are not exactly like these.
 - (a) Solve all of the problems in Homework #1–3.
 - (b) Solve Problems 2–5 on the handout on Lines.
 - (c) Solve all the problems on the handout on Toves and Borogoves.
 - (d) Solve all the problems on the handout on Committees.
 - (e) Analyze the following Geometrical Worlds on that handout: 2.2.1, 2.2.3, 2.2.4, 2.2.7, 2.2.9, 2.2.10, 2.2.12.
 - (f) Solve 1.1.3–1.1.9 in the Course Notes.
 - (g) Explain the meaning of the various features of axiomatic systems—consistent, independent, complete, categorical, model.
 - (h) Given an axiomatic system (such as axioms for people and committees), be able to determine and justify if the system is consistent or not, if each axiom is independent or not, and if the system is categoric or not.
 - (i) Solve 1.2.2–1.2.5 in the Course Notes.
 - (j) Understand Section 2.4 and solve 2.4.1, 2.4.2, 2.4.3, 2.2.4 (but with only specific points like $(1, 2)$ and $(3, 5)$, 2.4.6, 2.4.7, 2.4.10.
 - (k) Understand Section 2.5 (just the parts on 2×2 and 3×3 determinants) and solve 2.5.2 (1 and 2).
 - (l) Understand Section 2.6 and solve 2.6.2 and 2.6.3.
 - (m) Understand Section 2.7 and solve 2.7.2, 2.7.3, 2.7.4, 2.7.6.