

MA 341 — Homework #2

Due Friday, September 12, in class

Solve the four problems on the Committees handout. *Justify all of your answers!* To address consistency you need to either produce one model, or else you have to explain how the system leads to a contradiction. To address independence, for *each* particular axiom you need to either produce two models (one in which all axioms hold, and the other in which the particular axiom does not hold but the others do), or else you have to explain how the axiom can be deduced (proved) from the other axioms in the system. To address the categorical property you need to either explain why there is essentially only one model (the same except for changing names of people or committees), or else produce two essentially different (nonisomorphic) models (there is no way to make one model look like the other by changing names of people or committees).