

Math 311 — Homework 4

SEPTEMBER 19, 2008

Instructions.

Provide complete solutions to the following problems. Remember that Venn diagrams help visualize relationships between sets, but they do not prove the relationships. Show your work:

- **Problems:** Pages 55–60 numbers 18, 23, 31, 33, 35, and 38.
- **Theoretical Exercises:** Pages 61–63 numbers 9 (Remember, $n(E)$ is the cardinality of E .), 11, 12 (Hint: 62-13), and 13 (Hint: 61-3).