

Math 4740 - Test 1 Study Guide

Test 1 covers HW 1 and HW 2.

Homework 1:

- Creating a sample space S and probability function P .
Calculating $P(E)$ for events E .
Calculating the union, intersection, and complement of events.
See problems 1, 2, 3, 4.
- Various probability questions using dice.
See problems 5, 6.
- Constructing probability spaces and calculating probabilities using balls in a bag model.
See problems 7, 8.
- Problems 9 and 10 will not be on test 1.
Only do these two if you want to. They involve infinite probability spaces.

Homework 2:

- Counting problems: permutations and combinations.
Problems 1, 2, 3, 4, 5, 6.
- Probabilities with dice.
See problems 8, 9, 10, 13
- Probabilities with coins.
See problems 11, 12.
- Poker probabilities and card probabilities.
See problem 16, 17, 18.
- CA SuperLotto Plus
See problem 15.
- Compound probability spaces
See problems 19, 20.
- Other probability questions (random numbers, random seatings of people).
See problem 7, 14.