

Math 4740

Final Exam Study Guide

The final exam covers:

- Material from Test 1
- Material from Test 2
- New material

New material outline:

Homework 5:

- Using binomial random variables to calculate probabilities.
- How to compute the expected value and variance of a binomial random variable.

Homework 6:

- More on expected value and variance. The main thing for this homework is being able to calculate the expected value, variance, standard deviation, and graph the probability function $p(k) = P(X=k)$.
- Don't worry about problem 5 on Chebyshev's inequality.
- Don't worry about problem 6 on the geometric random variable.

Homework 7:

- You can ignore the Poisson distribution problems. Just work on using the normal distribution to approximate the Binomial distribution. This is problem 1 on the handout I made, and also problem 23 from the second handout. Also look at the ones we did in class.