

# Math 488P/588 Homework #11

**Reading due: Mon, 3/30/2015, Written problems due: Mon, 3/30/2015,**

NAME: \_\_\_\_\_

## Reading Assignments - current Status:

Bluman:

- skimmed chapter 1
- Ch.2: sections 2.1, 2.2, 2.4
- Ch.3: sections 3.1, 3.2, 3.3 (the part about standard scores)
- all of Ch.4
- all of Ch.5
- all of Ch.6
- all of Ch.7
- Ch.8.1, 8.2

Hossain/Makhnin:

- Chapters 1 - 3.5
- Chapters 4.1 - 4.3 and 4.6
- Chapter 5
- Chapter 6.2, 6.4 (CLT)

## Reading Assignments: Reading due: Monday, 3/30/2015

- A. Read Bluman Ch.8.3, 8.4.
- B. Read Hossain/Makhnin Chapter 8.

Some chapters in H/M I have skipped and they will be assigned at a later date:

- H/M 3.7: Poisson Distribution
- H/M 4.4: Exponential distribution
- H/M 4.5.1: Poisson process, disregarding the link with the Gamma function

All written assignments below are **due: Monday, 3/23/2015,**

## Assignment 1:

A computer manufacturer has records that indicate that the mean time to decommissioning their machines is 56.4 months. A recent survey from several customers that includes a total of 100 computers showed an average time of 58.2 months to retiring the machines. The standard deviation for this kind of equipment is known to be 8.9 months. Are the sample data evidence to support the hypothesis that the mean time to decommissioning the machines has increased? Test this at a 0.05 level of significance.

- a. do this test using the test value.
- b. do this test using the p-value method.