

Math 488P/588 Homework 13

Due: Thursday, 4/23/2015

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, 8.4

Hossain/Makhnin:

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

Reading Assignments: Reading due: Thursday, 4/23/2015

Bluman:

- all of Ch.10 - Regression

Problems on Regression

Assignment 1:

Given are the following data about sales of accessories for computers.

Company	# of accessories (10 K)	Revenue (Millions)
Apple	13.4	1.4
Asus	8.5	1.5
Dell	63	7
HP	29	3.9
Lenovo	19.1	2.8
Toshiba	20.8	2.1

Construct a scatter plot. What kind of relationship seems to exist between the two variables?

Assignment 2:

Compute the sample correlation coefficient. Be sure to use the Bluman “shortcut formula”. What conclusions do you draw from its value? Submit your calculations in form of a spreadsheet. The answer should be $r = .982$.

Assignment 3:

Test for the significance of r at a level of .05. Do this two ways:

- use critical values.
- use P-values.