**Week 4 class**

* Zoom class format
	+ Audio off
	+ Ask questions via chat; can allow audio if needed
	+ Video on
	+ Please arrive on time – may miss you in waiting room
* “y” vs. “Y” – We will use

* + “Y” for a random variable
	+ “y” for a particular value of the random variable

* + Book uses “y” for both ☹

* Project #1 grades

* + Poll – R Markdown?
	+ Diamonds
		- Once included carat, could see that pricing structure was similar to our expectations
		- Make sure look at ALL variables that could affect variable of interest
		- Trellis plots (co-plots) – STAT 873

* + Field goals
		- Odds ratios are widely used – STAT 875

* + R code/output format
		- Same as in the course notes
		- If use R Markdown, it’s o.k. if looks a little different
	+ Questions? Post to chat
* Q&A for Section 3, subsections 4-6
	+ Post to chat
	+ Probability distributions for continuous random variables in general
	+ Normal probability distribution
	+ How to take a random sample
	+ Central limit theorem
	+ R
* Change in Test #1 format
	+ “Take home”; Hardin 49 will not be open

* + Exam available from 2:30PM to 6:20PM on Canvas
	+ Test is in Word document; put all answers in it
	+ Once test is downloaded, you have 110 minutes to finish it
	+ Upload completed test to Canvas
	+ More specific details given during next class

* + Open book, open note, BUT not open classmate or anyone else
	+ Future tests may be in Hardin 49

* Project #2
	+ Due date is Thursday, September 17th at 5PM
	+ Groups of size 2-3; can change groups or work alone
	+ How to turn in

* + - Canvas
		- Only one person turn in
		- File name: Last names of all group members
		- All group member full names within project
	+ Questions? Post to chat
* Other questions? Post to chat
* What’s next?
	+ Today
		- Zoom: Office hours after class
		- Canvas: Quiz for Section 3 (subsections 4-6) due at 5PM; answers available late this evening

* + Thursday
		- Zoom: Office hours at 9:30AM

* + Friday
		- Zoom: Ved’s office hours at 10:15AM

* + Monday
		- Zoom: Lab with Ved; attend during your normal lab time
			* Watch video before class (video not complete yet)
			* We will post a message when available
			* This video depends on material in ConfidenceIntervals-1.docx

* + - Helpful to post questions to message/discussion board before class
	+ Next Tuesday
		- Class on Zoom at 9:30AM - Section 4 (subsection 1) video watch before
		- Review for exam – bring questions!
	+ Looking further ahead…
		- Test #1 on September 21



Chat window:



R code and output

> pnorm(q = 1.96, mean = 0, sd = 1)

[1] 0.9750021

> qnorm(p = 0.975, mean = 0, sd =1)

[1] 1.959964

> pnorm(q = 2, mean = 0, sd =1) - pnorm(q = 1.9, mean = 0, sd =

 1)

[1] 0.005966428

> pnorm(q = 1.97, mean = 0, sd =1) - pnorm(q = 1.95, mean = 0,

 sd = 1)

[1] 0.001168874

> dnorm(x = 0, mean = 0, sd = 1)

[1] 0.3989423

> curve(dnorm(x = x, mean = 0, sd = 1), col = "red", n =1000,

 xlim = c(-3,3))

> dbinom(x = 2, size = 10, prob = 0.2)

[1] 0.3019899

> pbinom(x = 2, size = 10, prob = 0.2)

Error in pbinom(x = 2, size = 10, prob = 0.2) : unused argument (x = 2)

> pbinom(q = 2, size = 10, prob = 0.2)

[1] 0.6777995

> P(Y <= 2)

Error in P(Y <= 2) : could not find function "P"

> help(pbinom)

starting httpd help server ... done

> qnorm(p = 0.8, mean = 30, sd = 1)

[1] 30.84162

> qnorm(p = 0.8, mean = 30, sd = 4)

[1] 33.36648

>

Windows Journal



