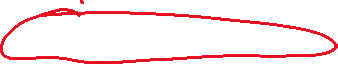
**Week 4 class**

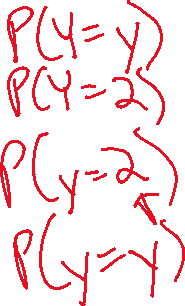
* Zoom class format
  + Audio off
  + Ask questions via chat; can allow audio if needed
  + Video on
  + Please arrive on time – may miss you in waiting room
* “y” vs. “Y” – We will use



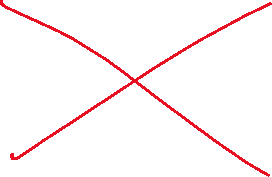
* + “Y” for a random variable
  + “y” for a particular value of the random variable



* + 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



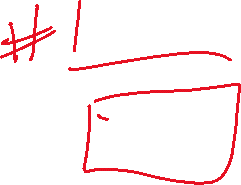
* + R code/output format
    - Same as in the course notes
    - If use R Markdown, it’s o.k. if looks a little different
  + Questions? Post to chat
* Q&A for Section 3, subsections 4-6
  + Post to chat
  + Probability distributions for continuous random variables in general
  + Normal probability distribution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



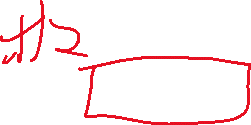
* + Exam available from 2:30PM to 6:20PM on Canvas
  + Test is in Word document; put all answers in it
  + Once test is downloaded, you have 110 minutes to finish it
  + Upload completed test to Canvas
  + More specific details given during next class



* + 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



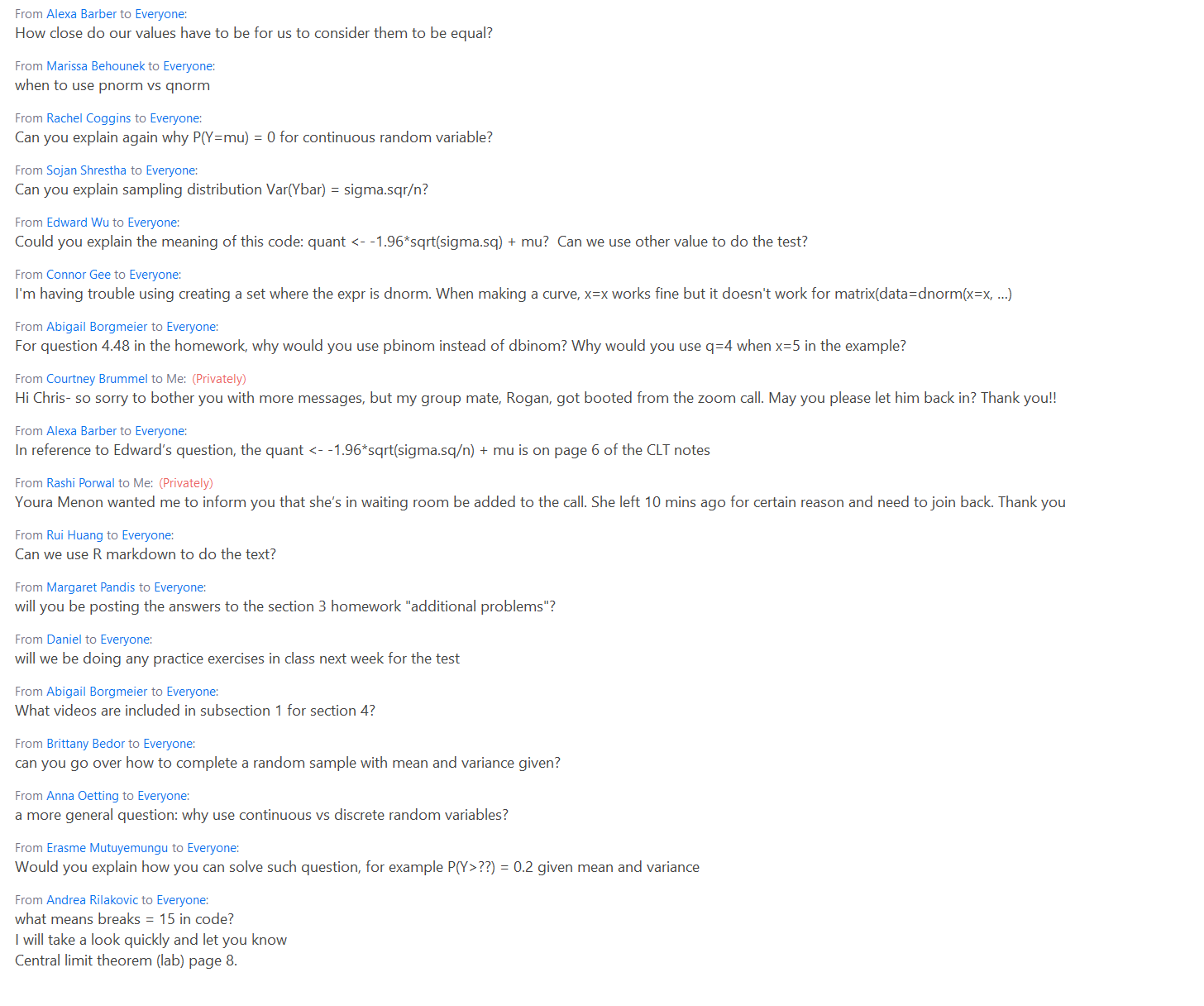
* + Monday
    - Zoom: Lab with Ved; attend during your normal lab time
      * Watch video before class (video not complete yet)
      * We will post a message when available
      * This video depends on material in ConfidenceIntervals-1.docx



* + - 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

