

Graphing Assignments

Math 113 - Introduction to Applied Statistics

You may work with one other person on each of these graphing assignments. You do not have to work with anyone else, but you may find it useful to have someone to reason through the process with you. Make sure you understand what is going on as you will need to recreate some of these graphs for your semester project.

Use Minitab to create the graphs that follow. Try to make the graphs look as close as you can to mine, but part of the process is to get you to play around, so colors and exact positioning aren't crucial. Do not close your graph from within Minitab. Instead, save your data and graphs as a project in case you need to open it and make changes. If you close the graph and then save, it will be lost.

For each document:

1. Create the graphs in Minitab. Save your Minitab project.
2. Create a new Word document. Type your name(s) at the top of each document. Even though your name is on the email, it also needs to be in the assignment.
3. Type the title that appears at the top of the page.
4. Copy the graphs from Minitab and paste them into the Word document.
5. Save the Word document.
6. Email the document to the instructor at james@richland.edu

You do not need to type the extra text that is on the page. I'm interested in the graphs.

If you fail to type your name on the document, you will lose 1 point. Don't type [the hints or the reminders](#) at the bottom of each page.

Each graphing assignment is worth 10 points. The assignments are due before the beginning of class on the day of the exam for that material. That is graphing assignment 1 is due the day of exam 1.

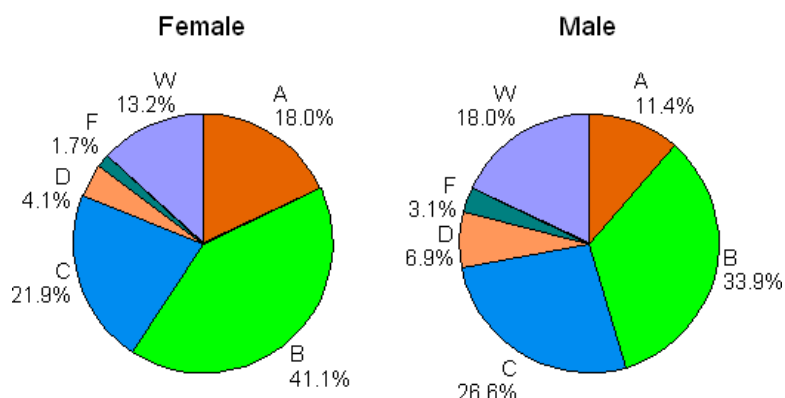
Late work will be accepted but will lose 20% of its value per class period.

Graphing Assignment 1: Chapters 1-3

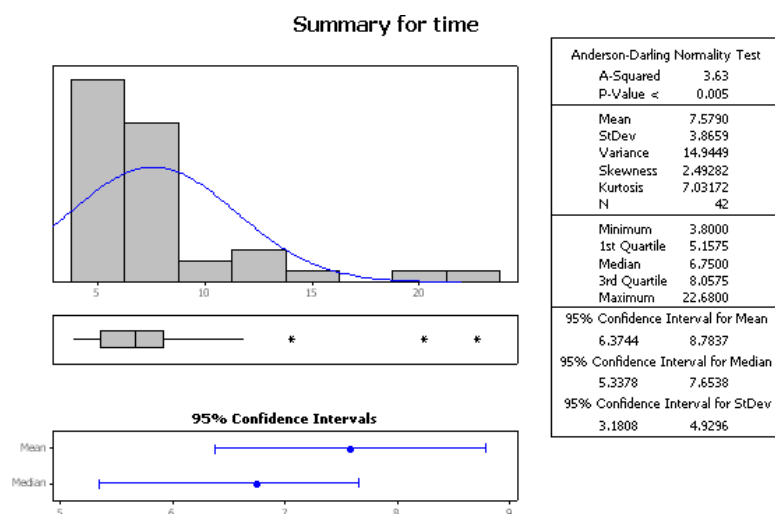
- The breakdown of grades earned in Math 113 sections taught by James Jones since 1997 are shown in the table. Use Minitab to create a side-by-side pie chart of the grade distribution as a percent by gender. You may need to drag the individual labels so they don't overlap.

Grade	Female	Male
A	75	33
B	171	98
C	91	77
D	17	20
F	7	9
W	55	52

Math 113 Grades

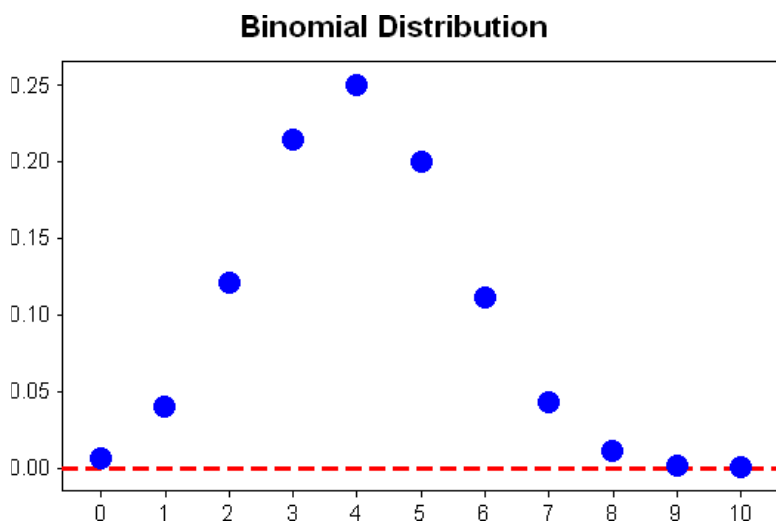


- Use the four legged walk data to create a graphical summary of the *time* variable. Include the data from both sections. Your graph will be similar to this one.

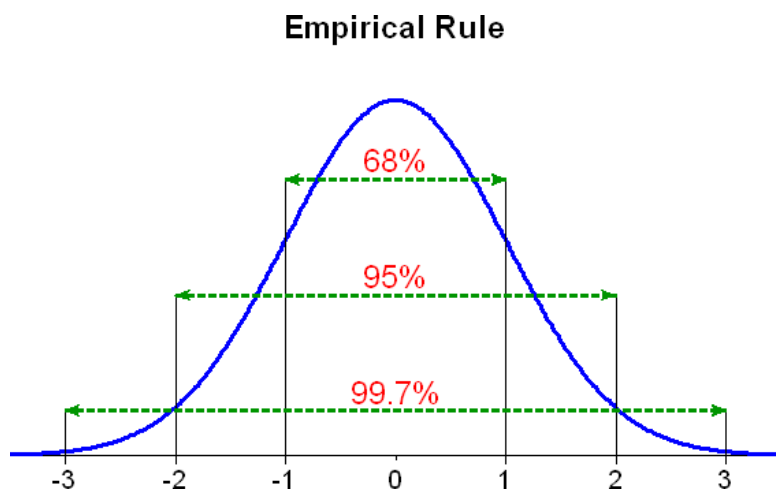


Graphing Assignment 2: Chapters 4-6

1. Create a graph of the binomial distribution when $n = 10$ and $p = 0.4$.



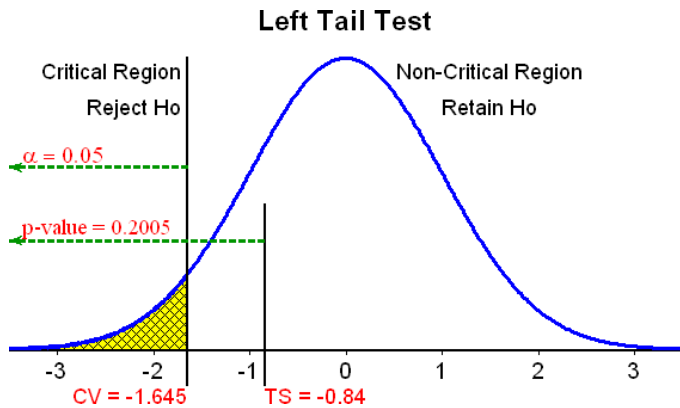
2. Create a graph illustrating the 68-95-99.7 rule.



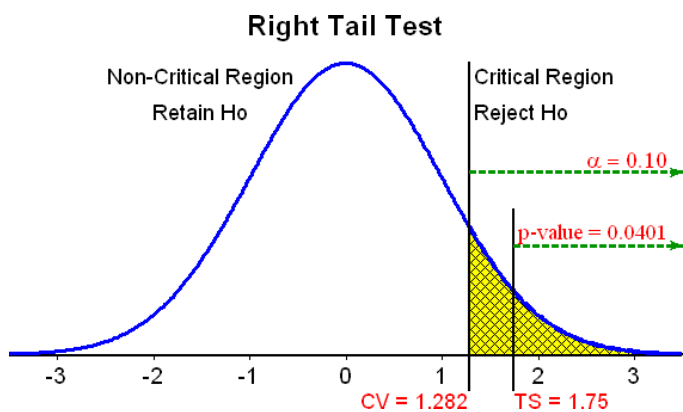
Graphing Assignment 3: Chapters 7-8

To get the alpha, type the letter *a* and then change the font to Symbol.

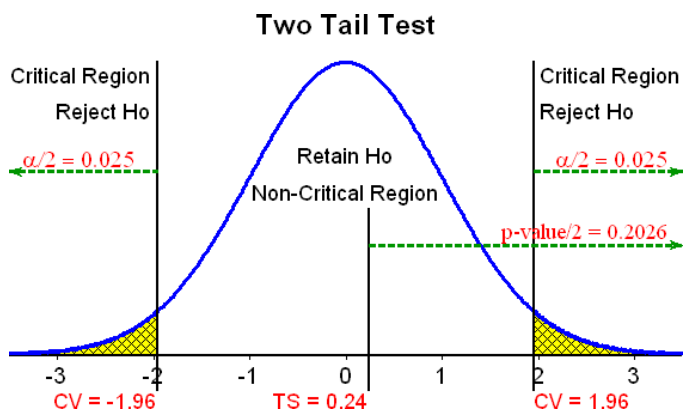
1. Left tail test with $\alpha = 0.05$, CV = -1.645, TS = -0.84, p-value = 0.2005



2. Right tail test with $\alpha = 0.10$, CV = 1.282, TS = 1.75, p-value = 0.0401

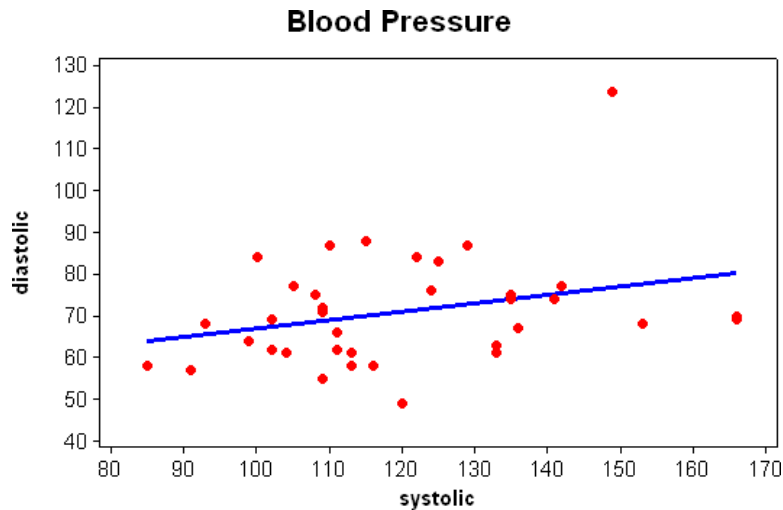


3. Two tail test with $\alpha = 0.05$, CV = ± 1.96 , TS = 0.24, p-value = 0.4052



Graphing Assignment 4: Chapters 9-10

1. Scatterplot of your response and predictor variables from the blood pressure activity. Include the data for both sections. Be sure to identify which variable is which. Your graph will be similar to this one.



2. A chi-square test with 5 df, $\alpha = 0.10$, CV = 9.24, TS = 6.57, p-value = 0.2546

