

STAT 269 - Introductory Statistics

Minitab Homework 7 (Unit 3 Part 2)

- Open Minitab and in the “Session” window at the top of the screen, type your name.
- In this homework, you will be gaining insight into confidence intervals, with Minitab’s help.
- Select “Calc”, then “Random Data”, then “Normal”.
- In the “Number of rows of data to generate” box enter 20.
- In the “Store in column(s):” box type “c1-c100”.
- For mean enter 100, and for standard deviation enter 15. (This would be like sampling from our IQ example.)
- Note that Minitab very quickly generates 100 samples for us (each column is a sample) with 20 observations in each.
- Now, select “Stat”, then “Basic Statistics”, then “1-sample t...”.
- In the “Samples in columns” box enter “c1-c100”. Be sure this option is selected.
- Select “Options...” and make sure that 95 and “not equal” are selected. Click “OK”.
- Click “OK” again. You should now see a long list of intervals.
- Go back through the list of 100 intervals. Note that some of them do not cover the correct value! (Recall we used a mean of 100.)
- Indicate intervals that missed by being entirely larger than 100 by typing @@@@ next to them.
- Indicate intervals that missed by being entirely smaller than 100 by typing next to them.
- At the bottom of the list, type in how many missed total, how many were too high, and how many were too low.
- Print the session window.