* ***Stat-plots:***
  + **To put X-values in L1:** STAT 🡪 1 (or enter) 🡪 plug in the x-values.
  + **To put Y-values in L2:** STAT 🡪 1 (or enter) 🡪 right arrow 🡪 plug in the y-values.
  + 2nd 🡪 STAT PLOT 🡪 1 🡪 Press Enter on ON 🡪 Down arrow (So, cursor blinks on the graph types) 🡪 Choose second graph in first line (then, press enter) 🡪 Down arrow (Cursor on Xlist) 🡪 type L1 (2nd 🡪 L1) 🡪 Down arrow (Cursor on Ylist) 🡪 type L2 🡪 Quit the window (by using 2nd 🡪 Quit) 🡪 ZOOM 🡪 9.
* ***Clear a column like L1:***
  + Up arrow (till the cursor is on the heading L1) 🡪 CLEAR 🡪 Enter.
* ***Calculate normal statistics:***
  + For this you need to plug in your data in L1 (refer to Stat-plots: To put X-values in L1).
  + **FOR TI-84:** STAT 🡪 Right arrow 🡪 1 (or enter) 🡪 type L1 🡪 clear everything in FreqList 🡪 Down arrow (cursor on Calculate) 🡪 ENTER.
  + **FOR TI-83:** STAT 🡪 Right arrow 🡪 1 (or enter) 🡪 type L1 🡪 ENTER.
    - **Should look like:** 1-Var Stats L1
* ***Calculate Frequency Statistics:***
  + Plug in your data values in L1 and frequency of each data in L2.
  + **FOR TI-84:** STAT 🡪 Right arrow 🡪 1 (or enter) 🡪 type L1 🡪 Down arrow (cursor on FreqList) 🡪 type L2 🡪 Down arrow (cursor on Calculate) 🡪 ENTER.
  + **FOR TI-83:** STAT 🡪 Right arrow 🡪 1 (or enter) 🡪 type L1 🡪 type comma (above #7) 🡪 type L2 🡪 Enter.
    - ***S*hould look like:**1-Var Stats L1, L2
* ***Box-plot graph:***
  + Plug in data in L1.
  + 2nd 🡪 STAT PLOT 🡪 1 🡪 Turn ON 🡪 Type of graph: 2nd in second line 🡪 Xlist: L1 🡪 Freq: 1 🡪 Quit the window 🡪 ZOOM 🡪 9.
* ***Binomial probability for “exactly”:***
  + 2nd 🡪 DISTR 🡪 press down arrow till you see “binompdf” 🡪 Press ENTER
  + **For TI-84:** Type in the numbers as asked.
  + **For TI-83:** Type in the numbers in the following way: binompdf(n,p,x)
* ***Binomial probability for “inequality”:***
  + 2nd 🡪 DISTR 🡪 press down arrow till you see “binomcdf” 🡪 Press ENTER

|  |  |  |
| --- | --- | --- |
| **Inequality for x-value** | **Plug in binomcdf** | **Further steps *(if needed)*** |
|  |  |  |
| Atmost (≤) | x | – |
| More than (>) | x | 1 – ANS (2nd 🡪 ANS) |
| Less than (<) | x-1 | – |
| Atleast (≥) | x-1 | 1 – ANS (2nd 🡪 ANS) |

**\**similar to binompdf, but only x-values change while plugging into calculator.***

* ***Geometric and Poisson Distribution:***
  + 2nd 🡪 DISTR 🡪 press down arrow till you see geometpdf/poissonpdf 🡪 Press ENTER.
  + **For TI-84:** Type in the numbers as asked.
  + **For TI-83:** Type in geometpdf(p,x) / poissonpdf(λ, x) or poissonpdf(µ,x)
* ***Find Combination (nCr):***
  + Type in ‘n’ 🡪 MATH 🡪 Right arrow till the cursor reaches PRB 🡪 3 🡪 Type in ‘r.’
* ***Find Permutation (nPr):***
  + Type in ‘n’ 🡪 MATH 🡪 Right arrow till the cursor reaches PRB 🡪 2 🡪 Type in ‘r.’
* ***Normal Probability Distributions (for “exactly”):***
  + 2nd 🡪 DISTR 🡪 1.
  + **For TI-84:** Plug in the numbers as asked (if mean and S.D. not given, then mean = 0, and S.D. = 1)
  + **For TI-83:** Type as follows: normalpdf(x, µ,σ)
    - **REMEMBER:** If z-score is given, replace x with z-score, and mean and S.D. automatically becomes 0 and 1, respectively.
* ***Normal Probability Distribution for inequality:***
  + 2nd 🡪 DISTR 🡪 2.

|  |  |  |  |
| --- | --- | --- | --- |
| **Inequality** | **Plug in normalcdf** | | **Final look** |
|  | **Lower limit** | **Upper limit** |  |
|  |  |  |  |
| Right of/More than (>) | Z-score or x | 1E99 or 10000 | Normalcdf(x,1E99,µ,σ) |
| Left of/Less than (<) | -1E99 or -10000 | z-score or x | Normalcdf(-1E99,x,µ,σ) |
| Between x1 and x2 | X1 or z-score 1 | X2 or z-score 2 | Normalcdf(x1,x2,µ,σ) |

* + - **How to type 1E99:** Type 1 🡪 2nd 🡪 EE (comma button) 🡪 Type 99.
* ***Z-test:*** STAT 🡪 Right arrow till you reach TESTS 🡪 1 🡪 Plug in numbers as asked.
* ***T-test:*** STAT 🡪 Right arrow till you reach TESTS 🡪 2 🡪 Plug in numbers as asked.
* ***Z-test with two populations:*** STAT 🡪 Right arrow till you reach TESTS 🡪 3 🡪 Plug in numbers as asked.
* ***T-test with two samples:*** STAT 🡪 Right arrow till you reach TESTS 🡪 4 🡪 Plug in numbers as asked.
* ***Proportion test:*** STAT 🡪 Right arrow till you reach TESTS 🡪 5 🡪 Plug in numbers as asked.
* ***Proportion test for 2 samples:*** STAT 🡪 Right arrow till you reach TESTS 🡪 6 🡪 Plug in numbers as asked.
  + For all of the above tests, choose the inequality of ***Ha***­ no matter what the claim is.
* ***Regression line:***
  + Plug in X-values in L1 and Y-values in L2.
  + STAT 🡪 Right arrow to CALC 🡪 4
  + **For TI-84:** Plug L1 for Xlist and L2 for Ylist and leave everything else blank 🡪 Press Calculate.
  + **For TI-83:** Type L1 🡪 Type Comma 🡪 Type L2 🡪 Press ENTER.
  + ‘a’ and ‘b’ of the equation ax+b is given, and r is the correlation coefficient.
  + Press ‘Y=’ 🡪 Type equation ax+b with the values of ‘a’ and ‘b’ 🡪 Quit (2nd 🡪 Quit)
  + Now follow the steps for ***Stat-plots*** to get the graph (but, select the **first graph in first line** instead of the one shown in the ***Stat-plots*** steps).