

TI-84 Plus Program for Exercise 1.4

1. Press **STAT** and select the default **Edit** by pressing **ENTER**
2. Press up arrow (^).
You should see **L1 =** on the bottom of the screen. (If you see **NAME=**, then you should key in **L1** (**L1** is 2nd- 1, right above the number **1** button).)
3. Press **MATH** and select **PRB** and **randBin**(
'**L1 = randBin(** ' should appear at the bottom of the screen.
4. Complete the entries to read **L1 = randBin(25 , .60 , 100)/25**. (This randomly finds the number of successes in 25 trials, when the probability of success is $\pi = .60$, and repeats this 100 times. Then each entry is divided by the number of trials 25, to obtain the proportion of successes p .)
5. After you complete the entry in step 4, hit the **ENTER** button and wait a couple of minutes. You will see list **L1** fill up with 100 simulated p 's.
6. To get the mean value of these p 's, hit **STAT** and select **CALC** and **1-Var Stats** and **ENTER**. You will see descriptive statistics for the list **L1**, including the mean denoted by \bar{x} .
7. To compute the average value of the random sampling error for part (b) of the exercise, press **STAT**, select **Edit**, the hit **up arrow (^)** followed by **right arrow (>)**. You will see '**L2 =**' at the bottom of the screen. Enter **L1 - .6**. (Recall the **L1** button is the second function for the number **1** button). You will see the 100 sampling errors in the list **L2**.
8. To get the average value of the random sampling errors, hit **STAT**, select **CALC** and **1-Var Stats**, type in **L2**, and the hit **ENTER**.
9. Part (c) and (d) can be completed using the same techniques given above.