## Script for computing factorials and binomials on the TI-83 Plus

## Factorials:

I will use the first problem of Key 26 as an example for the steps of doing factorials.

- After turning on calculator enter the first factorial integer 8. Press the Math button. Use the right arrow key to highlight PRB at the top of the screen.
- Use the down arrow key to highlight 4:!.
- Press enter
- Press divided by sign
- Press left parenthesis. Press 3. Press Math button. Use right arrow key to highlight PRB at the top of the screen. Use down arrow key to highlight 4:!
- Press × (multiply) button. Press 5. Press Math button. Use right arrow key to highlight PRB at top of screen. Use down arrow key to highlight 4:!. Press right parenthesis.
- Press ×. Press left parenthesis. Press .1. Press right parenthesis. Press ^3.
- Press ×. Press left parenthesis. Press .9. Press right parenthesis. Press ^5
- Press Enter.

You should obtain an answer of .03306744

## **Binomials:**

I will use the same problem as an example.

- Press DISTR button (second function of VARS)
- Use Down arrow key to select 0↓binompdf (
- Press enter. The screen will show binompdf (
- Press 8. Press ,. Press ,. Press 3. Press right parenthesis.
- Press enter.

You should obtain an answer of .03306744

If you are doing a "fewer than" problem as in problem two of Key 26 than follow these steps

- Press DISTR button (second function of VARS)
- Use Down arrow key to highlight A↓:binomcdf (
- Press enter. The screen will show binomcdf (
- Enter the total number of items (in the case of problem two Key 26 it is 7.)
- Press,
- Enter the percentage of total that are "doing" what you want (in problem two it is .35)
- Press,
- Enter the next highest number to the number you want fewer than (in the case of problem two it would be 3...since the problem asks for fewer than 4)
- Press the right parenthesis
- Press enter

You should obtain an answer of .8001542656