Sec I – Term 4, Statistics Name_____ ID: 1

Warm Up: T4-70 Date_____Period_____

Statistics on TI-84, TI-83, TI-82

1.Make sure that the calculator is free of data using the memory clear.

2nd + 7 1 2 .

2.Data Entry

Press STAT, then choose Edit. In one of the lists, enter data using the ENTER key. You can remove one item at a time by typing DEL and you can insert a line at a time by typing INS. You can clear a column by highlighting the column name and typing CLEAR and then ENTER. You can clear all the data by typing 2nd +, then choose ClrAllLists.

3. To calculate mean, median, standard deviation, Q1, Q3, etc.

Press STAT, then choose CALC, then choose 1-Var Stats. Press ENTER, then type the name of the list (for example, if your list is L3 then type 2nd 3). If your data is in L1 then you do not need to type the name of the list.

4. To calculate a linear regression or exponential regression.

Be sure to have you data in L_1 (x-values) and L_2 (y-values).

Plot the points on a graph: Be sure to set up the *Window* first. Next Press 2ND STAT, then choose Plot1, make sure it is turned on. Then press Graph If the group of dots is straight then it Linear, if it is curved, then its Exponential.

Linear Regression: Press STAT, then choose CALC, then choose LinReg. Press ENTER, Make sure that you are using L_1 (x-values) and L_2 (y-values). The equation will use $y=ax+b$ where the a value is the slope and the b value is the y-intercept.

Exponential Regression: If it is curved line, Press STAT, then choose CALC, then scroll down until you can choose ExpReg. The equation will use $y=a*b\wedge x$ where the a is the y-intercept and the b value is the factor of change (multiplier).

I kept track of how much money was in my savings account over the last 10 years.

Years	$ Saved
0	5000
1	5500
2	6050
3	6660
4	7320
5	8050
6	8860
7	9740
8	10720
9	11790
10	12970

1. Use your calculator to make a scatter plot of the data.

2. Try to fit a line to the data. Is it straight or curved?

3. Would a different type of function better fit the data?

4. Use your calculator to plot an exponential regression. How well does it fit?

5. What is the exponential regression equation?

6. Predict how much money I will have after 12 years.

7. Why was an exponential regression better to use for this data than a linear regression?