

INDEX CARD #8 REGRESSIONS TI-Nspire

1. Enter data into calculator:
 1. New Document
 2. Add Lists & Spreadsheet (4)
 3. Label A – This is your x variable (typically the first set of numbers of the data)
Go to A1 and enter the numbers in (press enter after each number to bring you to the next cell)
 4. Label B – This is your y variable (typically the second set of numbers of the data)
Go to B1 and enter the numbers in (press enter after each number to bring you to the next cell)
2. Press the Home Button
3. Pick the Graphs and Statistics (It looks like a bar graph at the bottom of the page (purple))
4. Label the axes....go to the left and click it then pick which label it is
Go to the bottom and click it then pick which label it is You will now see the scatter plot
5. Click page 1.1 at the top of the screen to get back to the spread sheet.
6. Menu.... Pick Statistics (4) Press the right arrow button
7. Press Stat Calculations (1) Press the right arrow button
8. Pick the type of regression that you want
 - 3: LinReg** -- **Linear Regression $mx+b$**
 - 6: QuadReg -- Quadratic Regression
 - 7: CubicReg -- Cubic Regression
 - 8: QuartReg -- Quartic Regression
 - 9: **PwrReg** -- **Power Regression**
 - A: ExpReg** -- **Exponential Regression**
 - B: LogarithmicReg** -- **Logarithmic Regression**

9. Type the X List label in.....Y List label in.....Then OK
10. **Write the screen with the a....b.... r^2r (Write down atleast 5 decimal places....NO ROUNDING)**
Write the equation: $Y = mx + b$ $Y = a(b)^x$ $Y=a(x)^b$ $Y= a + b\ln x$
Y =

You need to fill in the a...b....etc.

11. If you want to check your equation press 1.2 at the top of the screen
Then Analyze (4) Press right arrow key
Regression (6) Press right arrow key
Pick the type of regression
12. Round if told to do so
13. Show any substitutions if asked to find any other information & Solve

r is the correlation coefficient (tells how good of a fit the regression is)

The closer to 1 or -1 the better the fit