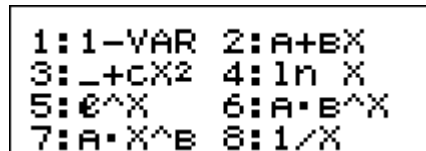


Curve Fitting

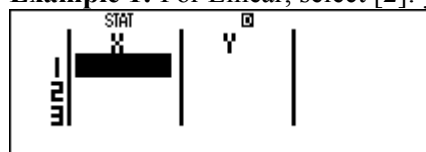
This resource was written by Derek Smith with the support of CASIO New Zealand. It may be freely distributed but remains the intellectual property of the author and CASIO.

Set the up calculator in **STATistics MODE**.

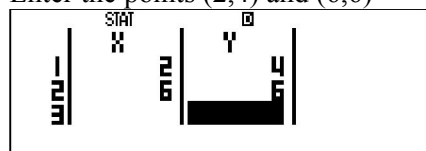


The above screen illustrates the mathematical models available.

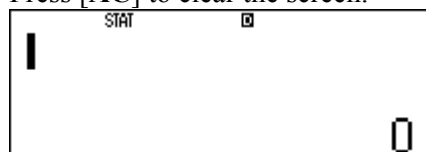
Example 1: For Linear, select [2]: $y = A+Bx$



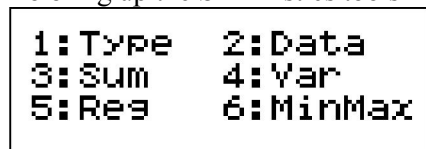
Enter the points (2,4) and (6,6)



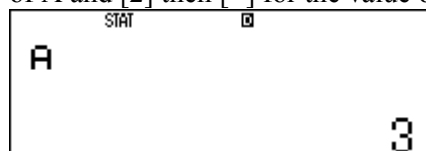
Press [AC] to clear the screen.



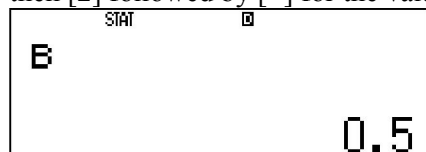
To bring up the **STATistics** tools Press [SHIFT] [1].



Then [5] for **Regression**. Press [1] then [=] for the value of A and [2] then [=] for the value of B.

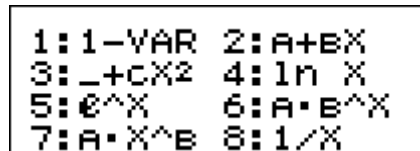


Repeat the process of 'bringing up the **STATistics** tools by pressing [SHIFT] [1]'. Press [5] for **Regression** and then [2] followed by [=] for the value of B.

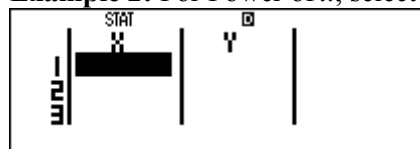


The linear equation is: $y = 3 + 0.5x$ or $y = 3 + \frac{1}{2}x$

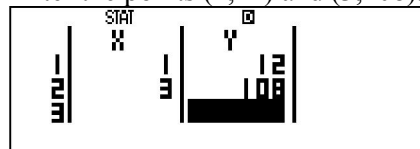
Example 2:



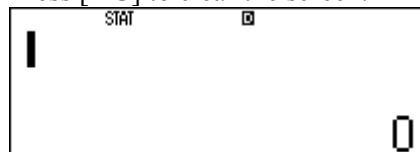
Example 2: For Power of x , select [6]: $y = A \times B^x$



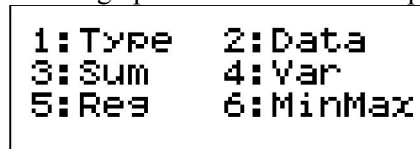
Enter the points (1,12) and (3,108).



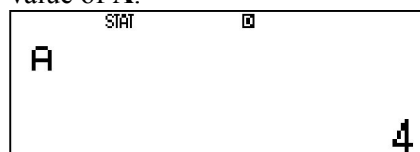
Press [AC] to clear the screen.



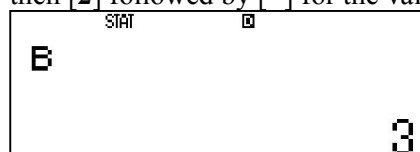
To bring up the **STATistics** tools press [SHIFT] [1].



Then [5] for **Regression**. Press [1], then [=] for the value of A.



Repeat the process of 'bringing up the **STATistics** tools by pressing [SHIFT] [1]'. Press [5] for **Regression** and then [2] followed by [=] for the value of B.



The power equation is: $y = 4 \times 3^x$

[**Note:** Follow the same procedure for the other mathematical models available on the FX82AU+ii.]

