

Statistical graphs –Bivariate Part 2

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Select STAT mode from the main menu by using the arrow keys to highlight the STAT icon or pressing 2.



Example:

Enter the following 2 variable statistics and graph a linear regression model of the data.

Student	Mathematics	English	Frequency
	x	y	f
a	2	2	1
b&c	3	3	2
d	4	3	1
e	5	5	1
f, g &h	6	6	3
i & j	7	7	2
k	8	6	1



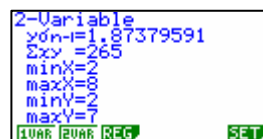
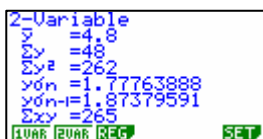
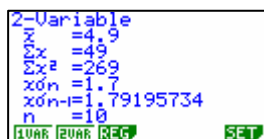
Set up the lists so the List 1 is the Mathematics (x values), List 2 is the English (y values) and List 3 is the frequency values.

Setting up for the data to be calculated in regression format (this calculator model performs a **Least Squares regression** model. This is done by pressing **F2** for **Calc** then **F6** for **SET**



Press the appropriate **F** keys to alter the **2Var XList**, **2Var YList** and **2Var Freq**.

Then press **EXIT** and **F2** for the summary statistics as shown below.



Setting up for the data to be graphed in regression format. This is done by pressing **F1**, then **F6** for **SET**



Press the appropriate **F** keys to alter the settings for a Scattergraph.

Then press **EXIT** and **F1** for **GPH1** (statistical graph #1) for the statistical graph – a scattergraph.

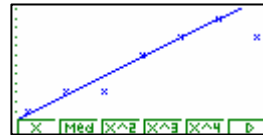


Press the appropriate **F** keys to 'fit' the data with a mathematical model.

linear
model

```
LinearReg
a=1.03114186
b=-0.2525951
r=0.98610645
y=ax+b
```

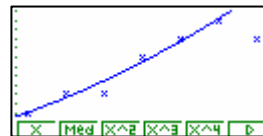
COPY DRAW



quadratic
model

```
QuadReg
a=0.05392156
b=0.53316032
c=0.73702422
y=ax^2+bx+c
```

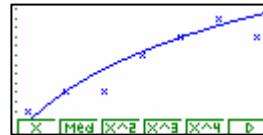
COPY DRAW



logarithmic
model

```
LogReg
a=-1.5000564
b=4.21089624
r=0.96187761
y=a+b*lnx
```

COPY DRAW



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www.monacocorp.co.nz/casio