## **Stats: Product Moment Correlation Co-efficient Notes NEW**

Product Moment Correlation Co-efficient (PMCC), r, shows us the linear correlation of bivariate data. It gives a number between -1 and +1.

- **-1** is perfect **negative** correlation. The closer the PMCC is to -1, the better the negative correlation
- **+1** is perfect **positive** correlation. The closer the PMCC is to +1, the better the positive correlation
- **0** is perfect **zero** correlation. The closer the PMCC is to 0, the less correlated the data is

## **How to calculate PMCC**

The value of r is

Casio fx-991CW Classwiz	Casio fx-CG50	
1) Press HOME	1) Press MENU	
2) Select Statistics	2) Select 2 Statistics	
3) Select 2-Variable and Clear data if necessary	3) Enter the data into the table	
4) Enter the data into the table	4) Select CALC (F2)	
5) Press EXE	5) Select REG (F3)	
6) Select Reg Results	6) Select X (F1)	
7) Select y=a+bx	7) Select a + bx (F2)	
8) Find the r-value	8) Find the r-value	

**E1:** Find the product moment correlation co-efficient of these data:

X	2	3	4	5
У	16	18	19	25

The value of 115
That is close to, so the scatter graph would show
Your Notes