## Correlation coefficient and equation of line of best fit using Casio fx-83 GT

Input the folowing data on fat grams and total calories in fast food

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Total Fat (g) | Total Calories |
| 1 | Hamburger | 9 | 260 |
| 2 | Cheeseburger | 13 | 320 |
| 3 | Quarter Pounder | 21 | 420 |
| 4 | Quarter Pounder with Cheese | 30 | 530 |
| 5 | Big Mac | 31 | 560 |
| 6 | Sandwich Special | 31 | 550 |
| 7 | Sandwich Special with Bacon | 34 | 590 |
| 8 | Crispy Chicken | 25 | 500 |
| 9 | Fish Fillet | 28 | 560 |
| 10 | Grilled Chicken | 20 | 440 |
| 11 | Grilled Chicken Light | 5 | 300 |

1. Numbering each row of data (if this is not already done) could make it less likely to miss a row as data is input. The calculator has rows numbered so it’s possible to cross check.
2. MENU, 2(Statistics ), 2(y=a+bx)
3. Input the data into columns x and y.( Press = after inputting each data item)
4. When they are all entered press OPTN
5. Choose 4( Regression Calc)



r = 0.9746

**To find the equation of the line of best fit is not now on the syllabus but the values for a and b information are given by the calculator.**

* The equation of the line of best fit is: y = 193.85+11.73x