

## POLIFIX

The program makes a polinomic fit, cuadratic, cubic or by fourth orden, starting by a table of data x and y, as a matrix. Adicionally give the  $r^2$  coeficient.

Name: POFIX  
Weight: 1621 kb  
Language: USER-RPL  
Platform: HP-49G  
System: RPN  
Based: Applied Statics and Probability for Engineers.  
Douglas C. Montgomery, George C. Runger.  
Editorial McGraw-Hill. Chapter 10 Multiple Lineal Regresion.

Now see how the program works:

Table 1

|   |      |     |      |      |      |     |     |      |      |      |     |      |
|---|------|-----|------|------|------|-----|-----|------|------|------|-----|------|
| x | 1,81 | 1,7 | 1,65 | 1,55 | 1,48 | 1,4 | 1,3 | 1,26 | 1,24 | 1,21 | 1,2 | 1,18 |
| y | 20   | 25  | 30   | 35   | 40   | 50  | 60  | 65   | 70   | 75   | 80  | 90   |

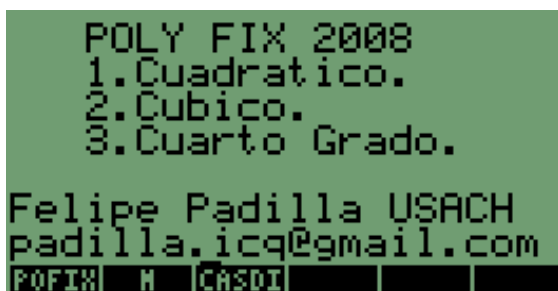


|   |      |    |
|---|------|----|
| 1 | 1.81 | 20 |
| 2 | 1.7  | 25 |
| 3 | 1.65 | 30 |
| 4 | 1.55 | 35 |
| 5 | 1.48 | 40 |

1-1: 1.81

EDIT VEC +WID WID+ GO+ GO+

Using the matrix writer put the data x in column 1 and the data y in the column 2.



POLY FIX 2008

1. Cuadratico.

2. Cubico.

3. Cuarto Grado.

Felipe Padilla USACH

padilla.icq@gmail.com

POFIX M CASDI

Execute POFIX and select a option.

For Example: cubic

```

DEG XYZ HEX R~ 'X'   HLT   PRG
{HOME}
Numero de Puntos:

```

↓

```

POFIN  M  CASDI

```

Put in the number of points.

For example 12 (see table 1)

```

Y=a+bx+cx²+dx³
a=2.252783216
b=-.0262483929
c=.000199117663
d=-4.4586003E-7
r²=.997773852612
POFIN  M  CASDI

```

Press ENTER and see the results.

Program created by:

Felipe L. Padilla Palma.

Chemical Engineering estudent

Universidad de Santiago de Chile – USACH

[padilla.icq@gmail.com](mailto:padilla.icq@gmail.com)

NOTE: The author do not have responsibility in the incorrect use of errors that this program could make.

For any question or suggestion, write please.