

How to Find a Function Given Points

Regression Instructions

To find the equation of a linear function:

1. Press **[STAT]** **[ENTER]** to bring up the lists.
2. To enter the x data from the table into the list [L1] press **[1]** **[ENTER]** **[2]** **[ENTER]** **[3]** **[ENTER]** **[4]** **[ENTER]**.
3. To enter the y data from the table into L2 press **[2]** and **[3]** **[ENTER]** **[7]** **[ENTER]** **[1]** **[1]** **[ENTER]** **[1]** **[5]** **[ENTER]**.
4. To find the equation press **[STAT]** **[2]** **[4]** **[ENTER]**.

x	y
1	3
2	7
3	11
4	15

L1	L2	L3	2
1	3	-----	
2	7		
3	11		
4	15		

L2(5) =			

```
LinReg(ax+b)
Xlist:L1
Ylist:L2
FreqList:
Store RegEQ:
Calculate
```

```
LinReg
y=ax+b
a=4
b=-1
```

To find the equation of a quadratic function:

1. Press **[STAT]** **[ENTER]** to bring up the lists.
2. To enter the x data from the table into the list [L1] press **[1]** **[ENTER]** **[2]** **[ENTER]** **[3]** **[ENTER]** **[4]** **[ENTER]**.
3. To enter the y data from the table into L2 press **[2]** and **[5]** **[ENTER]** **[6]** **[ENTER]** **[5]** **[ENTER]** **[2]** **[ENTER]**.
4. To find the equation press **[STAT]** **[2]** **[5]** **[ENTER]**.

x	y
1	5
2	6
3	5
4	2

L1	L2	L3	2
1	5	-----	
2	6		
3	5		
4	2		

L2(5) =			

```
QuadReg
Xlist:L1
Ylist:L2
FreqList:
Store RegEQ:
Calculate
```

```
QuadReg
y=ax^2+bx+c
a=-1
b=4
c=2
R^2=1
```