

## CHAPTER 21 - LEAST SQUARES REGRESSION LINE

### TI-84 Plus

To find the least squares regression line for the data alongside, enter the  $x$  values into **List 1**, and the  $y$  values into **List 2**.

$x$	0	50	100	150	200	250
$y$	17.7	20.4	22.0	25.0	26.0	27.8

L1	L2	L3	Z
0	17.7	-----	
50	20.4		
100	22		
150	25		
200	26		
250	27.8		
-----	-----		
L2(7) =			

Press **[STAT]** **[>]** **4:LinReg(ax+b)** **[2nd]** **1 (L1)** **[,]** **[2nd]** **2 (L2)** **[ENTER]** .

```
LinReg(ax+b) L1,
L2
```

So, the least squares regression line is  $y \approx 0.0402x + 18.1$ .

```
LinReg
y=ax+b
a=.0401714286
b=18.12857143
r²=.9839214788
r=.9919281621
```