Chapter 14 / **Example 1**

Spearman's rank correlation coefficient

Find Spearman's rank correlation coefficient for the following sets of data.

a

x	23	34	17	23	29	45
y	12	10	14	11	11	8

b

x	1	2	3	4	6
y	6	7	8	8	16

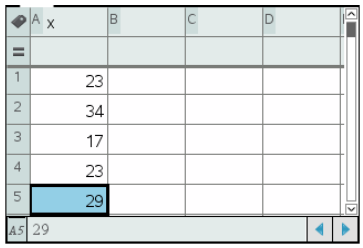
Open a new document and add a Lists & Spreadsheet page.

Type 'x' in the first cell.

Type the x-values in the first column.

Press enter or ▼ after each number to move to the next cell.

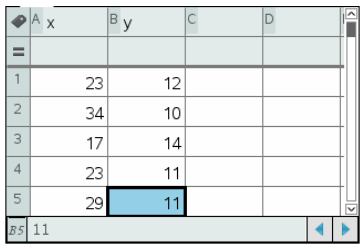
Note: *'x' is a label that will be used to calculate the correlation coefficient. You can use any letter or name to label the list.*



Type 'y' in the cell to the right of 'x'

Enter the y-values in the second column.

Use the ▲ ▼ ▶ ◀ keys on the touchpad to navigate the spreadsheet.



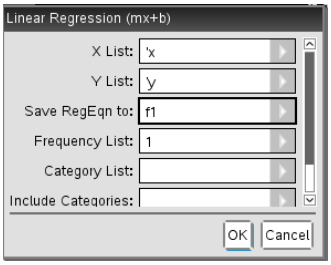
To calculate the correlation coefficient

Press menu 4:Statistics | 1:Stat Calculations | 3:Linear Regression (mx+b)…

Open the drop down lists with ▶ and select using ▼ and enter

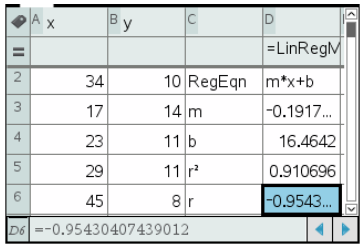
Choose 'x' for X List and 'y' for Y List and leave the remaining fields unchanged.

Click the touchpad on OK or press enter



Scroll down the calculated values to 'r' using ▼.

$r = -0.956$



Chapter 14 / **Example 1**

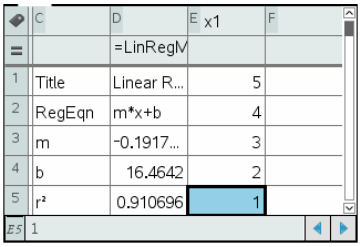
Spearman's rank correlation coefficient

The ranks are

x	5	4	3	2	1
y	5	4	2.5	2.5	1

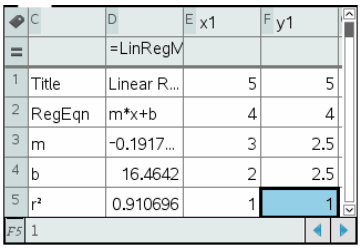
Type 'x1' in the first cell of the next available column.

Type the x-values in the column.



Type 'y1' in the cell to the right of 'x1'

Enter the y-values in the column.



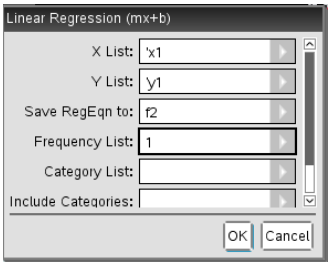
To calculate the correlation coefficient

Press menu 4:Statistics | 1:Stat Calculations | 3:Linear Regression (mx+b)…

Open the drop down lists with ▶ and select using ▼ and enter

Choose 'x1' for X List and 'y1' for Y List and leave the remaining fields unchanged.

Click the touchpad on OK or press enter



Scroll down the calculated values to 'r' using ▼.

$r = 0.975$