

# Finding a Best-Fit Line (TI-Nspire)

## I. Input Data

1. New Lists & Spreadsheet page -  $\left(\frac{\text{grid}}{\text{grid}}\right) \left(\frac{3}{3}\right)$
2. Name the columns.
3. Enter the  $x$  and  $y$  values into two columns.

## II. Perform Regression

1. Complete step I above.
2. Execute Linear Regression -  $\left(\frac{\text{menu}}{\text{menu}}\right) \left(\frac{4}{4}\right) \left(\frac{1}{1}\right) \left(\frac{3}{3}\right)$
3. Select name of  $x$  and  $y$  columns - press  $\left(\frac{\text{arrow}}{\text{arrow}}\right)$  to view options, move to desired name and press  $\left(\frac{\text{arrow}}{\text{arrow}}\right)$  again.
4. Press  $\left(\frac{\text{enter}}{\text{enter}}\right)$ .

## III. Create Scatterplot

1. Complete step I above.
2. New Graphs & Geometry page -  $\left(\frac{\text{grid}}{\text{grid}}\right) \left(\frac{2}{2}\right)$
3. Change Graph Type -  $\left(\frac{\text{menu}}{\text{menu}}\right) \left(\frac{3}{3}\right) \left(\frac{4}{4}\right)$
4. Select  $x$  data values - press  $\left(\frac{\text{arrow}}{\text{arrow}}\right)$  to view options, move to desired name and press  $\left(\frac{\text{arrow}}{\text{arrow}}\right)$  again.
5. Press  $\left(\frac{\text{tab}}{\text{tab}}\right)$  to move on to select  $y$  values (same as above).
6. Change window settings  $\left(\frac{\text{menu}}{\text{menu}}\right) \left(\frac{4}{4}\right) \left(\frac{1}{1}\right)$  if necessary to view scatter plot.

## IV. Graph Line of Best Fit

1. Complete steps I & II above.
2. If necessary, change Graph Type to Function -  $\left(\frac{\text{menu}}{\text{menu}}\right) \left(\frac{3}{3}\right) \left(\frac{1}{1}\right)$
3. Arrow up to view **f1(x)** in the Entry Line. Press  $\left(\frac{\text{enter}}{\text{enter}}\right)$  to graph the line.