

Technology Toolbox



Making a calculator scatterplot

We will use the beer consumption and blood alcohol content data from Example 3.5 (page 177) to show how to construct a scatterplot on a TI-83/84/89.

- Enter the beer consumption values in L₁/list1 and the BAC values in L₂/list2.

TI-83/84

| L1 | L2 | L3 | 1 |
|---------|------|----|---|
| 5 | .1 | | |
| 2 | .03 | | |
| 9 | .19 | | |
| 8 | .12 | | |
| 3 | .04 | | |
| 7 | .095 | | |
| 3 | .07 | | |
| L1(1)=5 | | | |

TI-89

| list1 | list2 | list3 | list4 |
|------------|-------|-------|-------|
| 5 | .1 | | |
| 2 | .03 | | |
| 9 | .19 | | |
| 8 | .12 | | |
| 3 | .04 | | |
| 7 | .095 | | |
| list1(1)=5 | | | |

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(continued)

Technology Toolbox



Making a calculator scatterplot (continued)

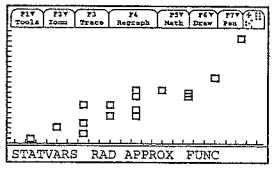
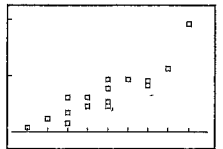
- Next, define a scatterplot in the statistics plot menu (press on the TI-89). Specify the settings shown.

| | | |
|--------|-------|-------|
| Plot1 | Plot2 | Plot3 |
| On | Off | |
| Type: | | |
| Xlist: | L1 | |
| Ylist: | L2 | |
| Mark: | | |

| | | | |
|--------------------------|-----------|---------|---|
| Define Plot 1 | | | |
| L1 | Plot Type | Scatter | → |
| Mark | Box | → | 4 |
| X | list1 | | |
| Y | list2 | | |
| Use Freq and Categories? | No | → | |
| Use X-axis | Off | | |
| Use Y-axis | Off | | |
| Enter=OK Esc=CANCEL | | | |

STATVARS RAD APPROX FUNC 1/11

- Use ZoomStat (ZoomData on the TI-89) to obtain a graph. The calculator will set the window dimensions automatically by looking at the values in L₁/list1 and L₂/list2.



- Notice that there are no scales on the axes, and that the axes are not labeled. If you copy a scatterplot from your calculator onto your paper, make sure that you scale and label the axes. You can use TRACE to help you get started.