Calculated and Named Lists

Concepts

- Creating calculated lists that are automatically updated as values in another list change
- Saving data into lists with appropriate names

Overview

This activity shows how to (1) define lists that automatically update the values in the list (like a spreadsheet) and (2) give lists meaningful names.

Materials

TI-84 Plus

Introduction

The sample data in this activity was collected in the °C to °F activity. Alternate data sets may by used.

Calculated Lists

1. Use the STAT editor to enter the following data into lists L1, L2, and L3 OR use your data from the °C to °F activity (Figure 1).

L1 (Time, sec)	L2 (Temp, OF)	L2 (Temp, OC)
0	34.4	1.8485
10	53.825	11.846
20	65.771	19.881
30	69.886	21.738
40	75.786	24.023
50	78.473	25.318
60	80.349	26.14

- 2. Press STAT ENTER to enter the Stat Editor.
- 3. Press and to scroll to list L4 (Figure 2).
- 4. Press ALPHA ["] 1 . 8 × 2nd [L3] + 3 2 (see bottom field of Figure 3).
- 5. Press ENTER.

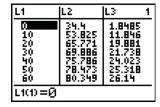


Figure 1

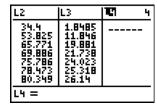


Figure 2

L2	L3	TC 1 4	
34.4 53.825 65.771 69.886 75.786 78.473 80.349	1.8485 11.846 19.881 21.738 24.023 25.318 26.14		
L4 = "1.8 * L3 + 32			

Figure 3

- 6. Compare the calculated values for °F in L4 to the experimental values in L2. The leading "symbol makes this a calculated list (Figure 4).
 - If you change or add a value to L3, notice that list L4 will be automatically updated (Figure 5).

Named Lists

- 1. Use the arrow to move to the top line of the Stat Editor. Use the arrow to move to the first "blank" area (Figure 6).
- 2. Enter a name (up to 8 characters) for the list, e.g. DEGF (for Degrees Fahrenheit) (Figure 7).
- 3. Press ENTER].
- 4. Next copy list L2 into DEGF by typing 2nd [L2] ENTER (Figure 8).
- 5. Repeat these steps to put the data in L3 into named list DEGC (for Degrees Celsius) (Figure 9).

Note: Data in named lists will not be overwritten by EasyDataTM (or DataMate) and will remain on the calculator until manually deleted (using [2nd] [MEM]). You can access named lists using [2nd] [LIST].

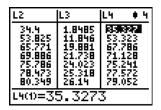


Figure 4

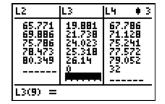


Figure 5

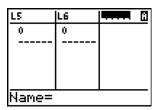


Figure 6

L5	L6	वक्ता ७
0	0	
DEGF =		

Figure 7

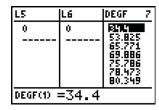


Figure 8

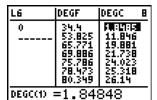


Figure 9