Appendix C

Using Formulas in Lists

- **1.** To use a formula in a list:
 - **a.** Highlight the name of the list you want to assign the formula to. You must be at the very top of the column or you will get an ERR:DATA TYPE message.

Li	Lz	48	3
1 1 2 3 5 8 1 3	1 2 3 5 8 13 21		
L3 =			

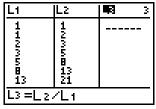
Correct Cursor Position

L1	L2	L3	3
1 1 1 2 2 5 8 1	1 2 3 5 8 1 2 1		
L3(1) =	•		

Incorrect Cursor Position

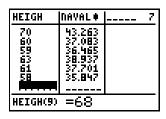
b. Use any operations or calculator functions with real numbers and previously defined lists. If L3=L2/L1, for example, press [2nd [STAT] and retrieve L2 by pressing 2 ÷, then [2nd [STAT] 1 ENTER].

Note: If you select a named list by pressing or **→** to move up or down, you will have to press **ENTER** twice.



Li	L2	L3 3
1 1	1 2	2
2006	3 5	1.5 1.6667 1.6 1.625
123583	1 2 3 5 1 2 1 2 1	1.625 1.6154
L3(1)	=1	

- **2.** You can use a formula like a formula in a spreadsheet by inserting the formula in quotation marks.
 - ♦ When you enter new numbers in the independent list, the dependent list with the formula assigned to it does the calculation. In the screen at the right, **HEIGH** is independent, whereas **NAVAL** is dependent.
 - ◆ Another difference you will notice when you enclose formulas in quotes is that when you go back to the top of the list, the formula will appear in the Name field instead of the data in set notation.



HEIGH	Taka 4	В
65 62 70 60 59 63 61	40.173 38.319 43.263 37.083 36.465 38.937 37.701	
navaL =" LHEIGH/1.6		

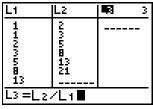
Formula with quotes

L1	L2	48 3
1 1	1 2	1 2 _
1 2 5 8 3	HAMMB B	1.5 1.6667 1.6 1.625 1.6154
5 8	8 13 21	1.6 1.625
13	21	1.6154
$L_3 = \{1, 2, 1, 5, 1, 6,\}$		

Formula without quotes

A very common error that occurs when using formulas is the **DIM MISMATCH** error, which means the lists being used in the formula do not have the same number of elements.

- 1. To correct this problem, go to the List editor, press CLEAR, and scroll down the lists used in the formula.
- **2.** Either add or delete elements to make the lists contain the same number of elements.





L1	L2	L3	2
1 2 3 5 8 13 21	3 B R R 21		
L2(5) =13			