



TI-83 instructions

More Than Your Heart Desires . . .

To create a list name or definition in the STAT list editor

- Press **STAT EDIT <ENTER>**
- Display the **Name=** prompt by pressing \blacktriangle
 - If a new list is needed
 - Highlight the name of an existing list by pressing \blacktriangle
 - Press 2nd **DEL** for INSERT to obtain a new list name and to display **NAME=** prompt
 - Press [letter from A to Z or Θ]. The first letter cannot be a number!
 - Enter zero to 4 additional letters, Θ , or numbers to complete the new user-created name. List names can be up to 5 characters long. Press <ENTER> or \blacktriangledown to store the list name in the current column
- You may highlight the list name and define the list using other list names and operations or you may enter data item by item.

SetUpEditor [*listname1*],[*listname2*], . . . [*listnamen*] allows the student to specify list names and the order in which the list names are displayed in the STAT list editor. Thus the student may use meaningful variables.

To create a list name in the **SetUpEditor** statement

- Press **STAT 5: SetupEditor**
- Press [letter from A to Z or Θ]. The first letter cannot be a number! If using all letters, ALPHA LOCK will be faster.
- Enter zero to 4 additional letters, Θ , or numbers to complete the new user-created name
- If more lists are desired enter \blacktriangle followed by a new list name

I. To begin this experiment set up the named lists:

Press **STAT 5: SetupEditor Gen, Age, Exer, InitC, A, B, ImpA, ImpB**

Gen = gender ; **Age** = age; **Exer** = exercise level ; **InitC** = initial Cholesterol level

A = cholesterol level after drug A administered; **B** = cholesterol level after drug B administered

ImpA = **InitC** - **A** = Improvement using drug A; **ImpB** = **InitC** - **B** = improvement using drug B

Press **STAT EDIT** - Enter data in the appropriate columns

Highlight list name **ImpA** and define this list to be **InitC - A**

(Pasting their names from the list of names menu is more efficient than typing the names.)

Define **ImpB** similarly.

Press **MATH** \blacktriangleright \blacktriangleright \blacktriangleright **PRB 5: RandInt (1, 24)** can be used to select a sample size of 12 for Drug A

(NOTE: Press **ENTER** as many times as needed to get 12 unique numbers.)

ALTERNATIVE METHOD: NO REPEATS

In the **HOME SCREEN**

Seq(rand, x, 1, 24) \rightarrow L₁ (NOTE:Seq is accessed from the home screen by pressing **LIST OPS 5**):

Seq(x, x, 1, 24) \rightarrow L₂

SortA(L₁, L₂)

L₂

Use the first 12 subject numbers in the sorted L₂ by scrolling through the list with \blacktriangleright

II. Block by age

- A. Sort by age: **STAT 2:SortA (Age, Gen, InitC, Exer, ImpA, ImpB)** (Note: Since you will not use A & B anymore it is not necessary to move them when sorting.)
- B. Divide into blocks of 2 - i.e. Row 1-2, 3-4, 5-6, 7- 8, 9-10, 11-12, 13-14, 15-16, 17-18, 19-20, 21-22, 23-24
- C. Randomly select 1 subject from each block of subjects for drug A
- D. From the HOME SCREEN **RandInt (1, 2)** to determine which member of a block gets drug A
i.e. 1 = Drug A goes to first member in the block, 2 = Drug A goes to second member of the block.
Do this 12 times. The remaining 12 subjects (1 in each block) get drug B.

III. Block by initial cholesterol level

- A. Sort by cholesterol level: **STAT 2:SortA (InitC, Gen, Age, Exer, ImpA, ImpB** After this instruction is executed Row 1 will have data for the subject with the lowest initial cholesterol level and Row 24 will have the data for the subject with the highest initial cholesterol level.)
- B. Divide into blocks of 2 - i.e. Row 1-2, 3-4, 5-6, 7-8, 9-10, 11-12, 13-14, 15-16, 17-18, 19-20, 21-22, 23-24
- C. Randomly select 1 subject from each block for drug A
- D. From the HOME SCREEN **RandInt (1, 2)** to determine which member of a block gets drug A
i.e. 1 = Drug A goes to first member in the block, 2 = Drug A goes to second member of the block.
Do this 12 times. The remaining 12 subjects (1 in each block) get drug B.