Sampling using software

In chapters 8 and 9, we often have a list of ID numbers for subjects and want to select some of these at random. A simple way to do this in Minitab is to

- 1. Make a list of all the ID numbers in column 1.
- 2. Sample from that column without replacement and put the result in Column 2.

For the following example, I will generate 285 ID numbers in Column 1 and then choose 25 of them at random, without replacement, and put those in Column 2.

To make the ID numbers:



This will put the numbers 1 to 285 in column 1.

Now, we will choose 25 of them, without replacement. (I'm not showing all of them here, of course.)

MINITAB Student - Untitled	Sample From <u>C</u> olumns	Sample From Columns	💾 Worksheet 1 ***			
File Edit Data Calc Stat Graph Editor Tools W	Chi-Sguare	C1 Sample 25 rows from column(s):	÷	C1	C2	C3
😝 🔲 🚑 🔮 🖩 Calculator	Normal	c1				
Column Statistics	– Multivariate Normal		1	1		283
Row Statistics	F		2	2		225
	L	Store samples in:	4	4		202
	Lipiform	c3	5	5		38
Make Patterned Data			6	6		227
Make Indicator Variables	Bernoulli		7	7		260
Set Base	Binomial		8	8		127
Worksheet, si: Random Data	Hypergeometric	Select Sample with replacement	9	9		110
Candom Data			10	10		264
		Help OK Cancel				

In chapter 9, when you are assigning 24 subjects to 3 groups, just put the IDs from 1 to 24 in column 1, and then randomly pick 24 from column 1 (again, without replacement, so that means you DO NOT click on the "Sample with replacement" box) and put those in Column 3. So you can use the first eight IDs for group 1, the next 8 IDs for group 2 and the third set of 8 IDs for group 3.