

Subgroups

Find the subgroup lattice for the group 0802. As a first exercise, keep the standard names. Then to check your results, use the descriptive names. Note that when students do this they can either be equipped with Lagrange's theorem or they can discover it in the course of their analysis. This, like many problems can become very tedious when attempted with minimal knowledge and planning. Look for efficient and elegant solutions!

EXAM or QUIZ Question¹ Does the Large group shown have a subgroup isomorphic to the smaller given group? If it does, then how many such subgroups are there? If such a groups does exist, specify it? Will it be normal? If it is normal, what will the resulting factor group be? **NOTE: This problem has a reasonable solution that does not require use of the software but only an understanding of what the software does. It is not necessary to enter these groups into the program**

¹To get a printout of group tables like this for yourself from the program, just right click the mouse when displaying the group table. Then choose "copy to Notes". This copies the program to the note file where it can be cut and pasted (with the ordinary windows commands) to Excel for formatting and printing.