

Textbook Exercises

Following is a list of exercises from the textbook *Contemporary Abstract Algebra* that should be completed as we progress through the text. The exercises are divided into three categories:

- A. Exercises in this category are mostly routine exercises designed to reinforce the concepts and theorems discussed in the chapter. All of these exercises should be completed.
- B. Exercises in this category are more challenging and thought provoking than the ones in Category A. Many of these will require a formal proof. It is not expected that you will be able to successfully complete each of these exercises on your first attempt. Do not be discouraged if you do not work all of these exercises but make sure you keep on trying. Keep a list of those that you are not able to complete, and during the semester, keep going back and attempting them again (and again). Not only will this be good review, but you may be able to work some of them several weeks later.
- C. Exercises in this category are similar to those in Category B, but I am planning to discuss many of these exercises in class. Minimally, you should read these exercises before they are discussed in class and attempt to understand the statement of the problem. It would be a good idea to attempt to complete them before they are discussed in class.

Chapter	Category A	Category B	Category C
1	6, 7, 8, 11, 12	9, 15, 17	4, 5
2	1, 3, 4, 7, 11, 13, 27	8, 20, 21, 23, 29, 32	19, 22, 26, 34
3	1, 2, 3, 8, 9, 17, 27, 31	6, 13, 14, 20, 35	4, 7, 21
4	1, 3, 5, 8, 33, 38	11, 18, 21, 27, 48, 53	22, 49
Supp. Exercises	4	3, 5, 10, 19	6, 11
5	1, 3, 5, 9, 11, 15, 17, 20, 21	13, 19, 27, 31, 36	10, 30, 38
6	1, 3, 5, 23, 29, 31	7, 19, 20, 24, 25, 27, 32	33, 34
7	1, 3, 7, 9, 42	15, 16, 21, 24, 26, 34, 39	
8	3, 4, 9, 10, 16, 19	7, 12, 14, 22, 32, 33, 34	
Supp. Exercises		7, 10, 12, 13, 14, 33	
9	1, 3, 5, 7, 8, 9, 17, 21, 32, 36, 44	27, 29, 30, 37, 38, 39, 41, 42, 47, 49, 57, 62	61, 63