

Suggested Homework Problems for Math 421

The textbook for the course is *Advanced Engineering Mathematics* (third edition) by Dennis G. Zill and Michael R. Cullen.

It is suggested that you work the following problems. However, there is more material here than will probably be covered in the semester course, so it will be up to your instructor to select the sections to be covered. (Indeed, other sections could be added.) It is also up to your instructor to decide which homework problems are to be handed in for grading.

Appendix II: 1, 6

4.1: 1, 5, 7, 13, 23, 35, 39, 41, 42

4.2: 7, 11, 23, 31, 35, 39

4.3: 3, 7, 9, 11, 15, 19, 37, 41, 45, 47, 49-54, 67

4.4: 3, 7, 9, 11, 19, 23, 27, 33, 37, 39, 41, 49, 51, 53

4.5: 1, 3, 9, 15

4.6: 1, 7, 9, 11

3.9: 11, 15, 17, 21

5.3: 45, 46, 47

12.1: 3, 7, 17, 23

12.2: 1, 5, 9, 15, 17, 21

12.3: 3, 5, 7, 13, 19, 23, 29, 35

12.4: 1, 5

12.5: 1, 5, 13

12.6: 15, 17, 19

13.1: 3, 11, 15

13.2: 1, 5, 7, 9, 11

13.3: 1, 3, 4

13.4: 1, 3, 5, 12, 13, 15

13.5: 5, 7, 15

13.8: 1, 3

14.1: 1, 3, 7

14.3: 1, 3

15.1: 1, 2, 7

15.2: 5, 9

8.1: 17, 23, 29, 35, 37, 46a,c

8.2: 5, 9, 11, 27, 39, 41

8.3: 9, 13, 15, 17, 19

8.4: 19, 21, 25, 27, 29

8.5: 5, 11, 13, 23, 31, 33, 34

8.6: 7, 25, 27, 31, 51, 53

8.7: 1, 9

8.8: 5, 13, 19

7.7: 3, 9, 13

8.10: 7, 13, 15

8.12: 5, 13, 15, 23, 37, 39

8.15: 1, 7

(Fall 2006: Professor Landweber).