Carnegie Mellon University

Department of Electrical and Computer Engineering

18-200 **Fall 2000**

Mathematical Foundations of Electrical Engineering

Problem Set 2

Issued: Tuesday, September 12
Due: Thursday, September 21

Note: You have 9 days to complete this problem set. You may want to start early and do a little at a time so you aren't swamped the night before the due date! Exam I will be given in class on Tuesday, September 26 and will cover Complex Analysis (basically, problem sets 1 and 2).

Do the following problems from these Problem Set sections of Kreyszig, chapter 12:

Section 12.4 p. 673

1. Problem 3
2. Problem 5
3. Problem 8
4. Problem 11

Section 12.6 p. 682

1. Problem 1
2. Problem 6
3. Problem 13 (you don't need to plot)
4. Problem 15 (you don't need to plot)

Section 12.7 p. 686-687

1. Problem 7
2. Problem 8
3. Problem 9

Section 12.8 p. 691-692

1. Problem 7 (just do $1 + i$ here)
2. Problem 11 (you don't need to plot)
3. Problem 14 (you don't need to plot)
4. Problem 17
5. Problem 23 (this is $1 + i$ raised to the $-1 + i$ power)