MATH 524 University of South Carolina
D. Meade Fall 1995

Homework Problems for Chapter 3
Iterative Methods for Unconstrained Optimization

Section	Page	Problems
3.1	128	# 1bd, 2, 3ab, 4
3.2	128	# 8, 11
3.3	128	# 9ab, 10
3.4	128	# 14, 15

Notes

- The theoretical results presented in Chapters 1 and 2 are very powerful. However, they may not be practical for real-life problems (*e.g.*, the minimization problems encountered when the dual geometric program has an infinite number of feasible vectors). In this chapter we will see several approximate methods for solving optimization problems. While these methods are designed for numerical computations, most of our work will still be done by hand.
- Homework problems will be collected each Monday. In general, problems for each section are due on the first Monday following their discussion in class.
- Do not wait until the last minute to look at the problems. In fact, I suggest that you look at the problems *in advance* of our discussion of the material in class.
- Some of our class sessions will be devoted to issues not addressed in the homework problems. These issues, which will often address possible drawbacks to a technique, are important.
- I have tried to keep the number of problems to a minimum. However, some of these problems will require some thought. You should expect that some parts of them do not make sense the first time you read them. However, as you re-read the problem, and the text, you should find that the questions start to become clearer.
- I expect you to come to me for help whenever it's needed. I believe it is very important (for this course) that you successfully work all these problems. My e-mail address is `meade@math.sc.edu`; my office phone is x6183.