All problems are due at the beginning of class on Friday.

Simon, Chapter 3: 3.1, part (e). (Problem 3.1 is fairly lengthy; we will sketch out a fair amount of it in class, and leave you to fill in some of the details.)

Simon, Chapter 4: Problems 4.2 and 4.4 For problem 4.4, only consider the one-dimensional case. Assume periodic boundary conditions.

Academic Honesty

You may use, without proof, any results from your text by simply quoting the result and giving the reference (e.g. equation number or page number). You should understand how that result was obtained, but you need not transcribe the derivation.

If you get bogged down with any of the problems, do not hesitate to discuss them with me or with a fellow student. However, if you discuss a problem with anyone (besides me) you should acknowledge that collaboration, and the work you turn in should be your own, not a copy of your collaborator’s work. Similarly, you should acknowledge any on-line sources you use, and the work you turn in should still be your own. Please see the Academic Honesty policy for more information about appropriate and inappropriate collaboration. If you have any questions about the academic honesty policy for this class, please ask.