

Physics A410: Thermal Physics

Problem Set 7

Assigned 2004 March 9

Due 2004 March 16

Show your work on all problems! Be sure to give credit to any collaborators, or outside sources used in solving the problems.

1 Schroeder 3.19

2 Schroeder 3.25

Note: this is an involved problem. Make sure you get an early start, and take it one part at a time. You'll want to keep your calculus book handy for the perturbative expansions in part (f).

3 Schroeder 3.28

4 Schroeder 3.32