

# Physics A410: Thermal Physics

## Problem Set 9

Assigned 2003 March 24  
Due 2003 March 31

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

**1 Schroeder 3.23**

**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 3.27**

**4 Schroeder 3.28**