Physics 112 **Problem Set #7** **Winter 2000**

DUE: THURSDAY MARCH 2, 2000

All problems are taken from Baierlein unless otherwise indicated. *In order to earn total credit for a problem solution, you must show all work involved in obtaining the solution.* Late homework received before Tuesday March 7 will be graded at half credit. No homework sets accepted after solution sets are handed out.

1. Chapter 13, problem 5 (p. 322)

2. Chapter 10, problem 4 (p. 240, 242)
   NOTE: Don't miss part (b) on p. 242.

3. Chapter 11, problem 7 (p. 267).

4. Chapter 11, problem 15 (p. 269).
   HINT: In this problem, the effect of the energy associated with the rest mass must be incorporated into the evaluation of the chemical potential. See RB section 11.6, pp. 262–263.

5. Chapter 12, problem 3 (p. 302).

6. Chapter 12, problem 4 (p. 302–303).

7. Chapter 12, problem 6 (p. 303).