Physics 214A   Winter 2009

Statistical Physics   Due 9:30 pm Tuesday, January 27

PROBLEM SET 3

Reading: Chapter 4 in Reif.

Problems:

1. Reif 3.5

2. Reif 3.6 (Think about your answer to 3.5 to do this problem.)

3. Reif 4.1

4. Reif 4.3

5. Reif 4.4 (Hint: Use the definition of entropy to calculate the entropy at $T = \infty$ and $T = 0$ and then use Eq. 4.5.1.)