Chemistry 342
Spring, 2001
Problem Set 3

Due Wednesday, September 12

Finish Chapter 2
Answer the following questions in Chapter 2: Exercises 4, 10 and 11; Problems 1, 2, 3, 4, and 5. In problem 5, assume that the solid CO_2 first evaporates and fills the vessel. The vessel is then opened, so that the gaseous CO_2 expands against the open air.

Also, answer the following question:

In the cycle discussed in Lecture 8, consider the path $3 \rightarrow 1$ to be a **straight line.** (In class it was treated as an isotherm, which is an hyperbola.) Calculate q and w for this path and compare your results with the values obtained for the hyperbola case.