Accelerated General Chemistry
Problem Set 12
Due Friday, December 5, 2008 (at 4:00 p.m.)
Total Points on This Assignment = 49

Notes: (1) When it is necessary to solve the quadratic equation in a problem, you may use a solver function built into your scientific calculator. (After nine years of teaching general chemistry, I am finally abandoning my devotion to the written use of the quadratic formula!)
(2) Report all pH to two significant figures (that is, to two decimal places). This is the maximum accuracy we can expect from a typical pH meter.

1. (8 points) Atkins and Jones Exercise 9.16. Do part (b) only. Use $\Delta_f H°$ and $S_m°$ (that is, molar entropy) values to solve this problem. Do not use standard Gibbs energies of formation.

2. (3 points) Atkins and Jones Exercise 9.18.

3. (6 points) Atkins and Jones Exercise 9.24. Very briefly justify your answer in part (b).

4. (6 points) Atkins and Jones Exercise 10.32. Do parts (a), (c), and (e) only.

5. (6 points) Atkins and Jones Exercise 10.54. Do part (a) only.

6. (6 points) Atkins and Jones Exercise 10.58. Do part (a) only.

7. (8 points) Atkins and Jones Exercise 10.63

8. (6 points) Atkins and Jones Exercise 10.70. Do part (a) only.