

Accelerated General Chemistry
Problem Set 10
Due Wednesday, November 12, 2008 (at 4:00 p.m.)
(note change in date from syllabus)
Total Points on This Assignment = 75

1. (20 points) Problems 7.4 and 7.23. In 7.23, assume that no work is done to change the state of the system (neither from A to B, nor from B to C). Skip part (c) of 7.23. Also, any reasonable number of significant figures will receive full credit.
2. (13 points) Problem 7.6. Note that in all cases, you are comparing standard molar entropies at 298 K (S_{298}°).
3. (6 points) Problem 7.25. Briefly justify each answer.
4. (9 points) Problem 7.27
5. (5 points) Problem 8.1
6. (3 points) Problem 8.9(a). (Skip part (b).) Assume that the ionization of acetic acid is negligible (it is a weak acid, after all).
7. (10 points) Problem 8.14. Hints: (1) The standard entropies you are correcting are listed in Table 7.1. (2) Use the pressure conversion factors on the inside back cover of Hanson and Green.
8. (9 points) Problem 8.20. Again, you will need to use Table 7.1.