

# MEMORANDUM

Chemistry  
Department

To: Ben, Cory, Molly and Peter  
From: John I. Gelder  
Date: February 9, 2002  
Re: Grading and returning PS #2

The answers to PS #1 are attached. After reviewing the problem sets I have decided we should grade problems 2.4, 2.7, and 2.8 for 3 points. The maximum possible on the problem set is twelve points. The remaining three points are awarded on an all or nothing basis for completion of the remaining problems. Students were not expected to answer PS2.9 or PS2.10 so do not deduct the 3 points for completion if these two questions are not answered.

If you have any questions about the grading procedure described below, please see me. Please do not assign any fractional points. Use a holistic approach, if the student's answer is not quite correct you must make the decision if it is at least half right in which case give the student the point. However, on the next occasion (in the same grading session) that you have to stop and ask yourself whether the student should receive the benefit of the doubt, do not give them the point. Reverse this procedure if for the first time you decide not to give them the benefit of the doubt, the next occasion give them the point. If the PS is marked LATE, deduct the 3 points for completion

Please return the graded problem sets to your students next week. Be sure to record the scores for each student.

Copies of the answers and the grading memo are on the WEB.

## Grading the Review Problem Set

- PS2.4     **3 points**     Grade part a and b. 3 points if work is shown and both answers correct. Do not get picky about the sign of the number reported in b. Any math errors, deduct 1 point. But only as long as all the work is correct. If the wrong value of  $\Delta H$  or a specific heat are used, or all of the steps are not included, or too many steps are included, deduct 1 point for the first instance and all 3 points for the second instance. Do not deduct for a sig fig error, but correct the answer and make a note on the student's paper.
- PS2.7     **3 points.**     Grade parts a, b and c. Each for 1 point. Both calculated P must be correct for the point. One wrong the other correct, deduct the point. Watch out if the student uses  $^{\circ}\text{C}$  rather than K. Auto loss of the point for part a). In part b, the explanation **MUST** say there is a comparison of the pressure due to the vapor (calculated in part a) to the vapor pressure at the specific temperature. The student must clearly differentiate between the two pressures. If they do not clearly explain which pressure is being compared deduct the point. In part c the pressures must compare to what is in a and what is in PS2.6. Be holistic, so if part a is wrong, and the student is consistent award the points in b and c
- PS2.8     **3 points.**     1 point for a nice graph. At least the axes must be labeled and the linear regression line drawn with the equation for the line. 1 point for the answer in part b with the work shown and the answer correct. Same for part c. In both cases be sure the units are included. Holistic. If the equation for the line is wrong in part a, but the student is consistent in b and c award the last two points.
- 3 points**     For attempting the remaining 5 problems. Remember each problem must have an answer, an attempt. If the student writes nonsense deduct the 3 points. Since several plots are required in this problem set, deduct the three points if the plots are not included.