# MEMORANDUM

Chemistry Department

To: Andy, Ben, Kevin, Matt and Tyler

From: John I. Gelder

Date: October 26, 2001

Re: Grading PS7

**STAFF MEETINGS…FRIDAYS, 3:30 p.m.**

The answers to PS #7 are attached. After reviewing the problem sets I have decided we should grade problems PS7.4, PS7.6, and PS7.7 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. Note: If the word 'Late' is written at the top of the Problem Set grade as usual but deduct 3 points from their total. Note: 'Late' means the student found me at the end of class or immediately after class. I will not accept Problem Sets more than a few minutes after class is over, and such cases will have a minimum of 3 points deducted from their score.

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.

Please return the graded problem sets to your students in laboratory 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**

PS7.4 **3 points** 1 point for the work that must be shown so it is clear what is done to the two equations to obtain the equilibrium constant for the new reaction. 1 point for arriving at the correct expression ($\sqrt{\frac{K_1}{K_2}}$) of the equilibrium constants and 1 point for the math. Watch out for students who multiply by one-half, rather than taking the square root. If that happens deduct a point for the equilibrium constant expression, but award the point as long as the math is consistent with the equilibrium constant expression.

PS7.6 **3 points** 1 point each for parts a, d and e. Pretty much R/W.

PS7.7 **3 points**. 1 point each for part a, b and c. If a is done incorrectly but the student writes the correct equilibrium expression and substitutes and solve correctly award the part b point. Part c is unrelated to a and b. What out for units on the answer. If missing correct but do not deduct any points. If there is an error in entering the value of the $\Delta H_f$, or a math error from calculating, deduct the point

**3 points** For attempting the remaining 4 problems. Remember each problem must have an answer, an attempt. If the student writes nonsense for any of the other answers deduct the 3 points.