

MEMORANDUM

Chemistry
Department

To: Ben, Kevin, Andy, Tyler, and Matthew
From: John I. Gelder
Date: December 7, 2001
Re: Grading and returning PS #15

The answers to PS #15 are attached. After reviewing the problem sets I have decided we should grade problems 15.3, 15.5, and 15.7 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.

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

- PS15.4 **3 points** Grade part a, c and e. Each for 1 point. Both ΔH and ΔS should be correct for the point.
- PS15.5 **3 points.** Grade parts a, c and e. Each for 1 point. In part a the value of ΔG must be correct. Check the ΔG 's for reaction a, c and e. In part c, check the temperatures for reaction a, c and e. If two out of three are correct award the point. In part e the student must conclude the reaction is nonspontaneous at all temperatures for the point.
- PS15.9 **3 points.** Grade parts c, d, and e. Each for 1 point. In part c the ΔH_f should be correct for the point. In part d) grade only the ΔS_f for oxalic acid. In part grade the $\Delta G_{\text{combustion}}$ for the point.
- 3 points** For attempting the remaining 6 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.