

General Chemistry 1
Problem Set 9
Due Monday, November 22, 2004

Note that Test 3 will be on Wednesday, November 24. The key for this problem set will be posted on the course web site on the evening of November 22.

1. (6 points) Silberberg 17.13. You should use the smallest set of whole number coefficients to balance each reaction.
2. (4 points) Silberberg 17.22
3. (4 points) Silberberg 17.42
4. (10 points) Silberberg 17.48. Note: To solve this problem, you must make a “simplifying assumption” (see pp. 732-734 in your text). You are required to check the validity of your assumption by computing if the decrease in the concentration of H_2S is less than 5%. (Hint to tutors—the answer in the Instructor’s Solution Manual is wrong.)
5. (8 points) Silberberg 17.52
6. (2 points) Silberberg 17.66
7. (4 points) Silberberg 17.72. Note that H is the symbol for enthalpy, which is defined as heat transferred at constant pressure. For the purpose of this course, enthalpy is synonymous with energy (E). You will learn the difference between E and H in Chemistry 112 next semester.
8. (10 points) Silberberg 17.90