**AP Chem: Unit 2 Practice Problems: Redox Reactions**

1. Determine the oxidation number of the elements in each of the following compounds:

a. H2CO3 b. N2  c. Zn(OH)42-

d. NO2-  e. LiH  f. Fe2O3

1. Identify the species being oxidized and reduced in each of the following reactions:

a. Cr+ + Sn4+  Cr3+ + Sn2+

b. 3 Hg2+ + 2 Fe (s)  3 Hg2 + 2 Fe3+

c. 2As(s) + 3 Cl2 (g)  2AsCl3

1. Write balanced equations for the following reactions:

a. Cr(OH)3 + Br2  CrO42- + Br- in acidic solution

b. above reaction in basic solution

c. HCOOH + MnO4-  CO2 + Mn2+ in acidic solution

d. ClO2-  ClO2 + Cl- in acidic solution