

Name \_\_\_\_\_ Period \_\_\_\_\_

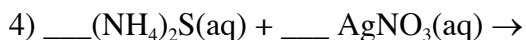
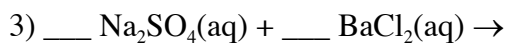
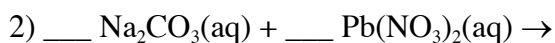
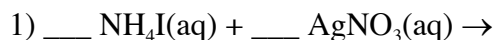
**AP Chemistry Test  
Chapter 4 Zumdahl**

**Form A**

**Part I:** Multiple Choice (2 points each)

1. \_\_\_\_      2. \_\_\_\_      3. \_\_\_\_      4. \_\_\_\_      5. \_\_\_\_  
6. \_\_\_\_      7. \_\_\_\_      8. \_\_\_\_      9. \_\_\_\_      10. \_\_\_\_

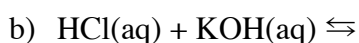
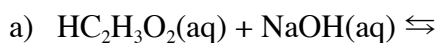
**Part I:** Write net ionic equations for the following reactions (20 points).



**Part II:** Determine the oxidation number of chlorine in the following compounds (10 points):

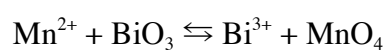
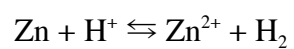
- |                     |          |
|---------------------|----------|
| 1. $\text{Cl}_2$    | 1. _____ |
| 2. $\text{ClO}^-$   | 2. _____ |
| 3. $\text{ClO}_2^-$ | 3. _____ |
| 4. $\text{ClO}_3^-$ | 4. _____ |
| 5. $\text{ClO}_4^-$ | 5. _____ |

**Part III:** Write balanced net ionic equations for the following acid base reactions: (10 points)



**Part IV:** Balance the following equations (10 points each):

a.) In acidic solution:



b) In basic solution:

