1. A concentration of 10-100 ppb (1 μg/L) by mass of Ag^+ is an effective disinfectant in swimming pools. Above 100 ppb Ag^+ has negative effects on health. Using Ksp values, calculate the equilibrium concentration of silver for the following silver salts. Determine the salt that would be the best choice to use in a pool. Circle your choice and show your work.

a. AgBr b. AgCl c. AgI

2. Three cations, Sr^{+2}, Cu^{2+} and Ag^+ are separated using two different precipitating reagents. What precipitating reagents could be used? (you may need to use Ksp values in addition to solubility rules)

3. Calculate the molar solubility of AgI in (you will need to look up the Ksp for AgI)

a. Water

b. 0.100 M NaI