**FRQs from Equilibrium Test**

**1. Justify your answer with balanced equations and calculations that explain how you solved the problem.**

**A. What is the molar solubility of Co(OH)3 in a solution that is 0.010 M in Co(NO­3)3? Ksp of Co(OH)3 = 2.3 x 10-12**

**B. How many grams of Co(OH)3 will dissolve in 250.0 mL of the 0.010 M Co(NO3)3 solution?**

**2. Justify your answer with balanced equations and calculations that explain how you solved the problem.**

**A. What is the molar solubility of PbBr2 in a solution that is 0.25 M in LiBr? Ksp of PbBr2  = 6.9 x 10­-5**

**B. How many grams of PbBr2 will dissolve in 500.0 mL of 0.25 M LiBr solution?**

**3. If 250.0 mL of a 1.0 x 10-3 M solution of Bi(NO3)3 is mixed with 350.0 mL of 1.5 x 10-3 M Na2S, will a precipitate form? Ksp of Bi2S3 is equal to 4.9 x 10-17.**

**Justify your answer with balanced equations and calculations that explain how you solved the problem.**