1. Silver sulfite (Ag₂SO₃) has a Ksp of $1.5 \times 10^{-14}$. What is the solubility of silver sulfite in mol/L and mg/L?

2. A maximum of 312 mg of BaF₂ will dissolve in 500.0 mL of solution?

   A. What is the Ksp for BaF₂?

   B. What will be the maximum [Ba²⁺] in a solution with [NaF] = 0.100 M
3.  A) Magnesium hydroxide has a $K_{sp}$ of $5.6 \times 10^{-12}$.
   What is the solubility of magnesium hydroxide in mol/L? in mg/L?

B) What is the pH of a saturated solution of magnesium hydroxide?

C) What will be the solubility (in mol/L) of magnesium hydroxide in a 2.5 $M$ solution of NaOH?

D) What will be the solubility (in mol/L) of magnesium hydroxide in a 2.5 $M$ solution of MgCl$_2$?

E) What will be the concentration of magnesium ions in a 1.5 $M$ solution of HCl if an excess of Mg(OH)$_2$ is available to dissolve?