- 1. Calculate the K_{sp} for each of the salts whose solubility is listed below.
 - a) $CaSO_4 = 5.0 \times 10^{-3} \text{ mol/L}$

b) $MgF_2 = 2.7 \times 10^{-3} \text{ mol/L}$

- 2. Calculate the molar solubility (concentrations) of the ions in the following compounds given their Ksp.
 - a) BaSO₄ with a $K_{sp} = 1.5 \times 10^{-9}$
 - b) FeS with a K_{sp} of 3.7 x 10^{-19}
- 3. Determine whether a precipitate will form if a person mixes 100.0 mL of 0.0015 M CaCl₂ with 50.0 mL of 0.0081 M K_2SO_4 if the K_{sp} of CaSO₄ is 2.4 x 10⁻⁵.