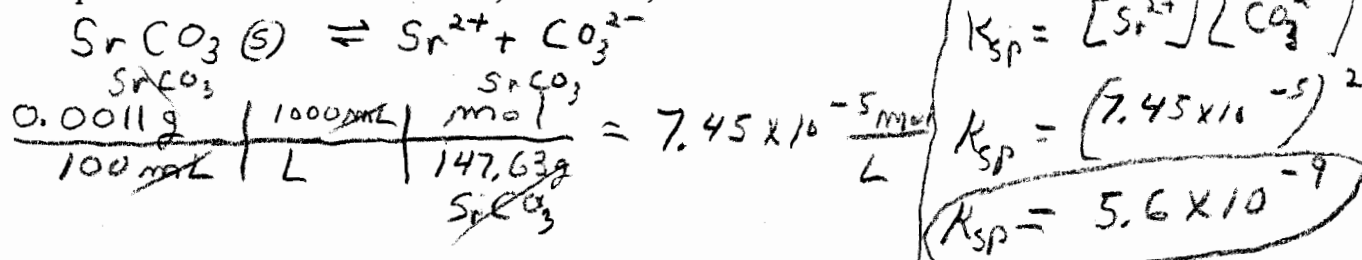
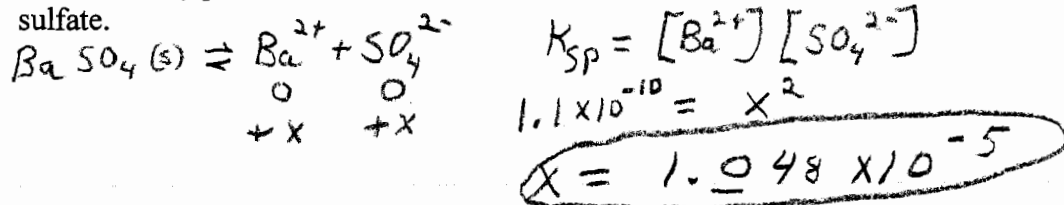


Show all work to receive credit.

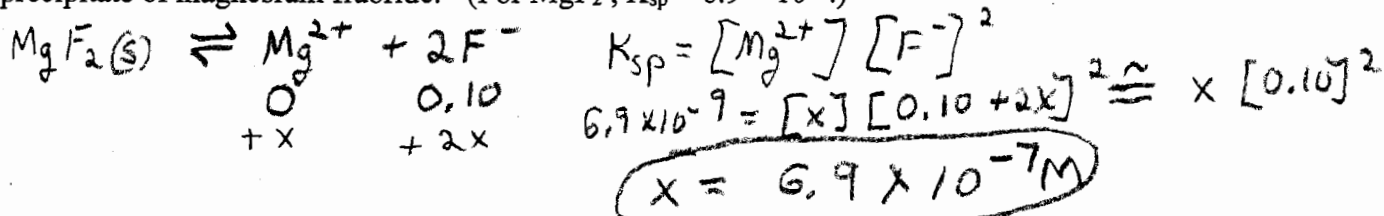
1. The solubility of strontium carbonate is 0.0011 g/100 mL at 20°C. Calculate the K_{sp} value for this compound. Molar Masses: Sr 87.62, C 12.01, O 16.00.



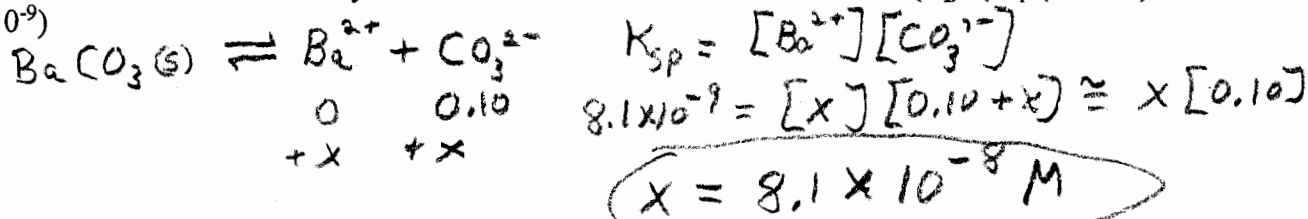
2. The solubility product for barium sulfate is 1.1×10^{-10} . Calculate the molar solubility of barium sulfate.



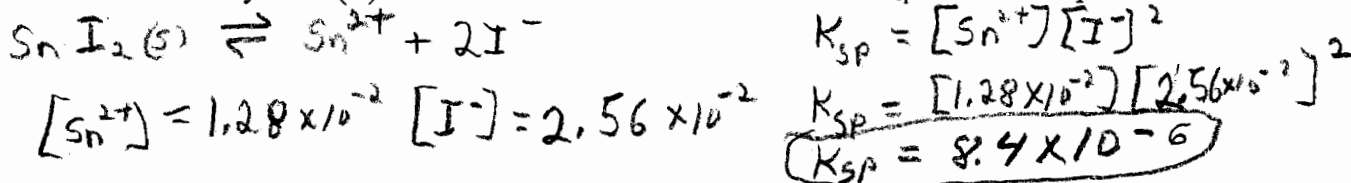
3. Calculate the minimum concentration of Mg^{2+} that must be added to 0.10 M NaF in order to initiate a precipitate of magnesium fluoride. (For MgF_2 , $K_{sp} = 6.9 \times 10^{-9}$.)



4. Calculate the molar solubility of BaCO_3 in a 0.10 M solution of $\text{Na}_2\text{CO}_3(\text{aq})$. ($K_{sp}(\text{BaCO}_3) = 8.1 \times 10^{-9}$)



5. The molar solubility of tin(II) iodide is 1.28×10^{-2} mol/L. What is K_{sp} for this compound?



6. Will a precipitate of magnesium fluoride form when 200. mL of 1.9×10^{-3} M MgCl_2 are added to 300. mL of 1.4×10^{-2} M NaF? ($K_{sp}(\text{MgF}_2) = 6.9 \times 10^{-9}$)

