Making Chalk – Problem Set

25g of calcium chloride is dissolved in 150mL of water. This solution is then mixed with 150mL of 0.75M sodium carbonate.

1. Write a balanced chemical equation for the reaction of the 2 aqueous solutions described above.
2. Write a total ionic equation for this reaction.
3. Write a net ionic equation for this reaction.
4. What are the spectator ions for this reaction?
5. Is there a precipitate in this reaction? If so, what is it?
6. Go back and write in the states of matter in the reaction above.
7. What is the concentration of the calcium chloride solution?
8. How many molecules of sodium carbonate went into making the solution described?