

CHEM 36
General Chemistry
Quiz #8 – K_{sp} Demo Redux

April 12, 2002

Name: _____

1. Will PbCO_3 precipitate when the Mixture 1 solutions (10 mL 0.01 M Pb^{2+} + 5 mL 0.01 M CO_3^{2-} in 35 mL water) are combined? K_{sp} for PbCO_3 is about 10^{-14} . Verify experimentally.

2. Will PbI_2 precipitate when the Mixture 2 solutions (10 mL 0.01 M Pb^{2+} + 5 mL 0.01 M I^- in 35 mL water) are combined? K_{sp} for PbI_2 is about 10^{-8} . Verify experimentally.

3. Will PbCO_3 and/or PbI_2 precipitate when 1 mL 0.1 M Pb^{2+} is added to the Mixture 3 solution (5 mL 0.01 M CO_3^{2-} + 5 mL 0.01 M I^- in 40 mL water)? How much Pb^{2+} would we need to add to get BOTH to precipitate? Verify experimentally.