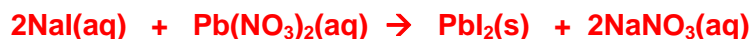


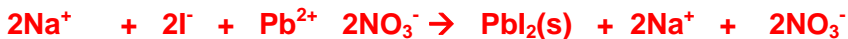
TABLE 9.2 Solubility Guidelines: Soluble Compounds	
Water-soluble compounds	Insoluble exceptions
Compounds containing an alkali metal cation (Li^+ , Na^+ , K^+ , Rb^+ , Cs^+) or the ammonium ion (NH_4^+)	
Compounds containing the nitrate ion (NO_3^-), acetate ion ($\text{C}_2\text{H}_3\text{O}_2^-$), or chlorate ion (ClO_3^-)	
Compounds containing the chloride ion (Cl^-), bromide ion (Br^-), or iodide ion (I^-)	Compounds containing Ag^+ , Hg_2^{2+} , or Pb^{2+}
Compounds containing the sulfate ion (SO_4^{2-})	Compounds containing Ag^+ , Hg_2^{2+} , Pb^{2+} , Ca^{2+} , Sr^{2+} , or Ba^{2+}

TABLE 9.3 Solubility Guidelines: Insoluble Compounds	
Water-insoluble compounds	Soluble exceptions
Compounds containing the carbonate ion (CO_3^{2-}), phosphate ion (PO_4^{3-}), chromate ion (CrO_4^{2-}), or sulfide ion (S^{2-})	Compounds containing Li^+ , Na^+ , K^+ , Rb^+ , Cs^+ , or NH_4^+
Compounds containing the hydroxide ion (OH^-)	Compounds containing Li^+ , Na^+ , K^+ , Rb^+ , Cs^+ , or Ba^{2+}

Question 1: (2 points) Write the molecular chemical equation for the double replacement reaction of Sodium Iodide and Lead (II) nitrate



Question 2: (1 point) Write the total ionic chemical equation for the above reaction



Question 3(1 point) Write the net ionic equation for the reaction above.



Question 4(1 point) What are the spectator ions in the reaction above?

