## Section 8.1 Complete the following assignment in your class notebook with the heading: Balancing Equations (II) Partial Key

Write balanced chemical equations (including phases!) for each of the following reactions.

1. Gaseous ammonia reacts with aqueous hydrochloric acid to form ammonium chloride.

NH3(5) + HC/(8) -> NH4C/(8)

2. When heated solid calcium carbonate decomposes to form solid calcium oxide and gaseous carbon dioxide.

Cacos(s) -> cac(s) + cor(9)

3. Solid barium oxide reacts with liquid water to form aqueous barium hydroxide.

BaO(s)+ H2O(l) > Ba(OH)2(9)

4. Liquid acetaldehyde (CH3CHO) decomposes to form natural gas (methane, CH4) and carbon monoxide gas.

CH\_CHO(R) -> CH\_(9)+ CO(9)

5. Zinc reacts with aqueous copper(II) nitrate to form aqueous zinc nitrate and copper.

Zn(s)+ Cn(NO3)2(98) -> Zn(NO3)2(48)+ Cu(s)