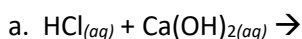
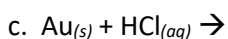
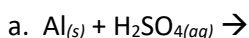


Chemistry – Chapter 11 Book problems #4: Review problems

1. Write a balanced net ionic equation for the following reactions:



2. Complete each equation and then write a net ionic equation.



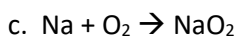
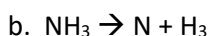
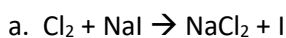
3. Write a balanced chemical equation for each reaction.

a. Bubbling chlorine gas through a solution of potassium iodide gives elemental iodine and a solution of potassium chloride.

b. Bubbles of hydrogen gas and aqueous iron (III) chloride are produced when metallic iron is dropped into hydrochloric acid.

c. Solid tetraphosphorus decaoxide reacts with water to produce phosphoric acid.

4. Each equation is incorrect. Find the errors, then rewrite and balance each equation.



5. Write balanced chemical equations for these double-replacement reactions that occur in aqueous solution.

a. Zinc sulfide is added to sulfuric acid.

b. Sodium hydroxide reacts with nitric acid.

c. Solutions of potassium fluoride and calcium nitrate are mixed.

6. Write a balanced chemical equation for each combination reaction.

a. sodium oxide + water

b. hydrogen + bromine

c. dichlorine heptoxide + water

7. Write balanced chemical equations for these single-replacement reactions that occur in aqueous solution. Assume the reaction occurs.

a. Steel wool (iron) is placed in sulfuric acid.

- b. Mercury is poured into an aqueous solution of zinc nitrate.
- c. Bromine reacts with aqueous barium iodide.