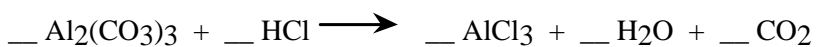


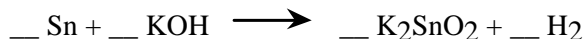
Honors Chapter 3 Review Problems

1. Balance the following equation:

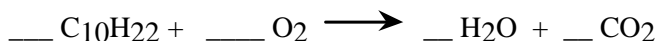


The coefficient in front of the reactant, hydrochloric acid is _____

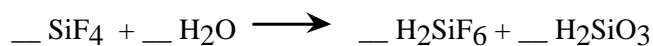
2. A mixture containing 59.35 g of tin and 14.03 g of potassium hydroxide is allowed to react according to the reaction given below. What mass of hydrogen gas is formed?



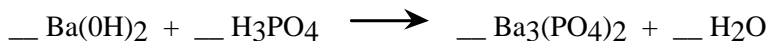
3. What is the coefficient in front of O₂ when the equation below is balanced?



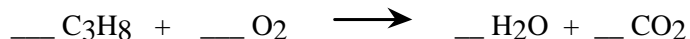
4. How many moles of H₂SiF₆ will be produced when 6.00 mol of H₂O are consumed?



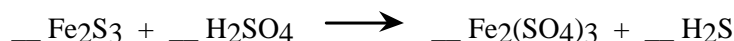
5. What mass of barium hydroxide is needed to react with 9.80 g of phosphoric acid?



6. How many moles of oxygen are consumed when 2.50 mol of propane (C₃H₈) are combusted?



7. Iron (III) sulfide reacts with sulfuric acid as follows:

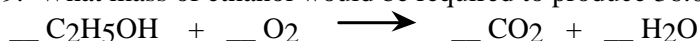


When 49.0 g sulfuric acid reacts with 207.9 g of iron (III) sulfide the limiting reactant is _____ and _____ g of hydrogen sulfide will be formed.

8. What mass (grams) of barium hydroxide would be required to make 15.0 grains of ammonia?
(1 g = 15.4 grains)



9. What mass of ethanol would be required to produce 36.0 g of water?



10. The reaction of 9.21 g of glycerin (C₃H₈O₃), with an excess of nitric acid resulted in the production of 17.0 g of the explosive, nitroglycerine. What is the percent yield?

