

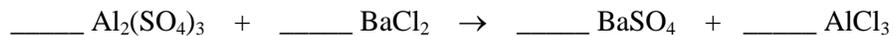
Name: _____

Period: _____

Stoichiometry Exam Review

Problems: SHOW WORK TO RECEIVE CREDIT

1. According to the reaction below, what is the mole ratio of aluminum sulfate to aluminum chloride?



- a) 2:1 b) 1:2 c) 2:2 d) 3:2

2. From the same equation, what is the mole ratio between barium sulfate and aluminum chloride?

- a) 2:1 b) 1:2 c) 2:2 d) 3:2

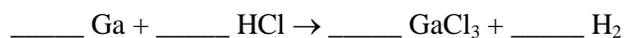
3. What conversion factor from the reaction below would you use to begin converting 4.56g of N_2 to moles of NH_3 produced?



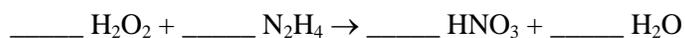
4. How many moles of NH_3 may be produced from 1.20 moles of N_2 assuming that hydrogen is excess.



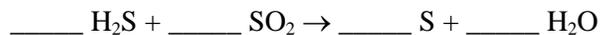
5. Calculate the number of moles of H_2 produced from 0.78 moles Ga and 1.92 moles HCl?



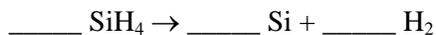
6. How many moles of H_2O_2 are required to react with 11.0 g of N_2H_4 according to the following reaction?



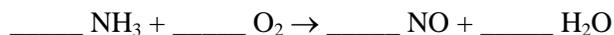
7. How many grams of S are formed at STP from the reaction of 6.80 g of H₂S and 7.43 L SO₂ according to the following reaction?



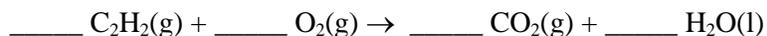
8. Thin films of silicon, used in fabrication of electronic components, may be prepared by the decomposition of silane. What mass (in g) of SiH₄ is required to prepare 0.2173 g of silicon?



9. The reaction of 0.68 g of NH₃ with excess O₂ according to the following reaction yields 0.98 g of NO. What is the percent yield?



10. A chemist combines 6.32 g of C₂H₂ and 12.2 g of oxygen. How many grams of carbon dioxide are produced?



What is the limiting reactant? _____

How many grams excess reagent remain after the previous reaction? _____

Know the following terms:

stoichiometry
percent yield
actual yield
theoretical yield
gram formula mass

Law of Conservation of Mass
excess reagent
limiting reagent
mol-mol ratio