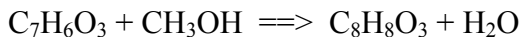
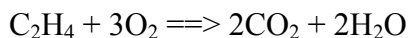


Percent Yield/Limiting Reactant Homework

1. A chemist reacts 1.75 grams of $C_7H_6O_3$ with excess methyl alcohol and collects 1.42 grams of $C_8H_8O_3$. What is the percentage yield for this reaction?

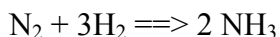


2. C_2H_4 burns in oxygen to produce carbon dioxide and water following the reaction:

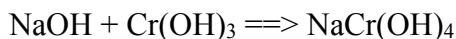


If 8.0 grams of O_2 are consumed by this reaction and 2.3 grams of water condense within the reaction chamber, what is the percentage yield?

3. What is the percentage yield of the following reaction if 5.50 grams of hydrogen react with nitrogen to form 20.4 grams of ammonia?

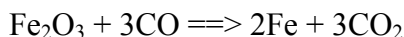


4. The first step in creating high quality chromium chemicals involves the reaction:



If you begin with 66.0 grams $Cr(OH)_3$ and obtain 38.4 grams of $NaCr(OH)_4$ what is the percentage yield?

5. If 8.9 grams of CO_2 is produced by reacting 6.0 grams of CO with excess Fe_2O_3 following the reaction:



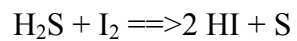
What is the percentage yield?

6. In lab, a student reacts 10.8 grams $AlBr_3$ with excess magnesium and collects the solid metal product by filtering it. He weighs his product and finds that he has collected 0.8 grams of aluminum. A) Write the balanced equation, B) what type of reaction is this C) what is his percentage yield?

7. Aluminum hydroxide is used in antacids to neutralize stomach acid. If stomach acid is HCl : A) write and balance the reaction that takes place between an antacid and stomach acid. B) What type of reaction is this? C) If 0.50 grams of aluminum hydroxide produces 0.28 grams of water, what is the percentage yield?

Limiting Reactant

A) 4.11 grams of iodine is reacted with 0.48 grams of H₂S. Which is the limiting reactant?



B) 6.7 grams of Zn is reacted with 23.5 grams of boron chloride. Which is the limiting reactant?