Chemistry Stoichiometry Review Name:

Answer the following stoichiometry-related questions. Use significant figures and label all answers.

1) Write the balanced equation for the reaction of acetic acid with aluminum hydroxide to form water and aluminum acetate:

2) Using the equation from problem #1, determine the mass of aluminum acetate that can be made if I do this reaction with 125 grams of acetic acid and 275 grams of aluminum hydroxide.

3) What is the limiting reagent in problem #2?

4) How much of the excess reagent will be left over after the reaction is complete?

Chemistry Percentage Yield Name:

1) LiOH + KCl 🡪 LiCl + KOH

a) I began this reaction with 20.0 grams of lithium hydroxide. What is my theoretical yield of lithium chloride?

b) I actually produced 6.0 grams of lithium chloride. What is my percent yield?

2) C3H8 + 5 O2 🡪 3 CO2 + 4 H2O

a) If I start with 5.0 grams of C3H8, what is my theoretical yield of water?

b) I got a percent yield of 75.0%. How many grams of water did I make?

3) Be + 2 HCl 🡪 BeCl2 + H2

My theoretical yield of beryllium chloride was 10.7 grams. If my actual yield was 4.5 grams, what was my percent yield?

4) H2SO4 🡪 H2O + SO3

If I start with 89.0 grams of sulfuric acid and produce 7.1 grams of water, what is my percent yield?