## **Mass to Mass Stoichiometry Problems**

In the following problems, calculate how much of the indicated product is made. Show all your work.

1) LiOH + HBr  $\rightarrow$  LiBr + H<sub>2</sub>O

If you start with ten grams of lithium hydroxide, how many grams of lithium bromide will be produced?

2)  $C_2H_4 + 3 O_2 \rightarrow 2 CO_2 + 2 H_2O$ 

If you start with 45 grams of ethylene  $(C_2H_4)$ , how many grams of carbon dioxide will be produced?

3) Mg + 2 NaF  $\rightarrow$  MgF<sub>2</sub> + 2 Na

If you start with 5.5 grams of lithium chloride, how many grams of calcium chloride will be produced?

4)  $2 \text{ HCI} + \text{Na}_2\text{SO}_4 \rightarrow 2 \text{ NaCI} + \text{H}_2\text{SO}_4$ 

If you start with 20 grams of hydrochloric acid, how many grams of sulfuric acid will be produced?