## **Stoichiometry Homework**

1) How many grams of lithium sulfate will be formed when 25 grams of sulfuric acid react with an excess of lithium hydroxide in the following reaction?  $H_2SO_4 + LiOH \rightarrow Li_2SO_4 + H_2O$ 2) How many grams of sodium acetate are required to react completely with 30 grams of iron (III) nitrate in the following reaction? \_\_\_\_ NaC<sub>2</sub>H<sub>3</sub>O<sub>2</sub> + \_\_\_\_ Fe(NO<sub>3</sub>)<sub>3</sub>  $\rightarrow$  \_\_\_\_ NaNO<sub>3</sub> + \_\_\_ Fe(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>3</sub> 3) How many grams of fluorine gas will it take to convert 100 grams of C<sub>2</sub>H<sub>4</sub> to C<sub>2</sub>H<sub>4</sub>F<sub>2</sub> using the following reaction?  $C_2H_4 + F_2 \rightarrow C_2H_4F_2$ 4) Using the following reaction, how many grams of sodium bromide can be formed from 45 grams of iron (III) bromide and an excess of sodium?

 $\_$  Na +  $\_$  FeBr<sub>3</sub>  $\rightarrow$   $\_$  NaBr +  $\_$  Fe