Directions: *Use the mole highway and dimensional analysis to solve. Show all your work!*

1) __LiOH + __HBr → __LiBr + __H_2O [unbalanced]
If you start with 10 g of lithium hydroxide, how many grams of lithium bromide will be produced? **Ans: 36.3 g LiBr**

2) __C_2H_4 + __O_2 → __CO_2 + __H_2O [unbalanced]
If you start with 45 grams of ethylene (C_2H_4), how many grams of carbon dioxide will be produced? **Ans: 141.4 g CO_2**

3) __LiCl + __CaF_2 → __LiF + __$CaCl_2$ [unbalanced]
If you start with 5.5 grams of lithium chloride, how many grams of calcium chloride will be produced? **Ans: 7.14 g $CaCl_2$**

4) __HCl + __Na_2SO4 → __NaCl + __H_2SO_4 [unbalanced]
If you start with 20 grams of hydrochloric acid, how many grams of sulfuric acid will be produced?