1. BALANCE the equation first. $FeCl_3$ + O_2 $\rightarrow$ Fe_2O_3 + Cl_2

    a. How many moles of chlorine gas can be produced if 4 moles of $FeCl_3$ react with 4 moles of O_2? SHOW ALL WORK!

    b. What is the limiting reactant?

    c. What is the excess reactant?

2. Use the following BALANCED equation.
    $$2\ C_2H_6 + 7\ O_2 \rightarrow 4\ CO_2 + 6\ H_2O$$

    a. If 15 g of C_2H_6 react with 45 g of O_2, how many grams of water will be produced?

    b. What is the limiting reactant?

    c. What is the excess reactant?