

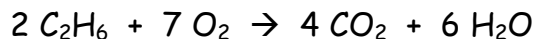
1. BALANCE the equation first.  $\text{FeCl}_3 + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3 + \text{Cl}_2$

a. How many moles of chlorine gas can be produced if 4 moles of  $\text{FeCl}_3$  react with 4 moles of  $\text{O}_2$ ? SHOW ALL WORK!

b. What is the limiting reactant?

c. What is the excess reactant?

2. Use the following BALANCED equation.



a. If 15 g of  $\text{C}_2\text{H}_6$  react with 45 g of  $\text{O}_2$ , how many grams of water will be produced?

b. What is the limiting reactant?

c. What is the excess reactant?