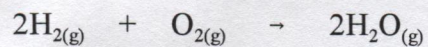


For the following problems, SHOW ALL WORK.

1. Given the reaction,



to produce 0.800 moles of $\text{H}_2\text{O}_{(g)}$,

a.) how many moles of H_2 are needed?

b.) how many liters of O_2 are needed?

c.) how many molecules of O_2 are needed?

2. Given the reaction



how many grams of NH_3 will be required to react with 63g of O_2 ?

3. Given the following reaction



determine the number of liters of carbon dioxide produced when 36.0 liters of oxygen gas is used.