

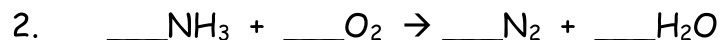
Answer each of the following questions using the equation provided. BE SURE TO BALANCE EACH EQUATION BEFORE SOLVING ANY PROBLEMS. SHOW ALL WORK.



a. 2 moles of NO will react with _____ mole(s) of O_2 to produce _____ mole(s) of NO_2 .

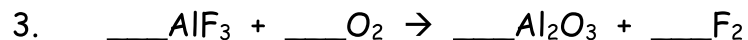
b. ? moles $\text{NO}_2 = 3.6 \text{ moles } \text{O}_2 \times \frac{\text{moles } \text{NO}_2}{\text{moles } \text{O}_2} =$

c. How many moles of NO must react to form 4.67 moles of NO_2 ?



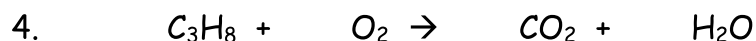
a. 20 moles of NH_3 are needed to produce _____ moles of H_2O .

b. How many moles of N_2 will be produced if 3.5 moles of O_2 react?



a. 20 moles of AlF_3 will produce _____ moles of F_2 .

b. _____ moles of AlF_3 will react with 0.6 moles of O_2 .



a. How many moles of oxygen react with 11 moles of C_3H_8 ?

b. How many moles of CO_2 are produced if 3.5 moles of water are produced?



a. Fill in the following word equation--_____ moles of oxygen gas react with _____ moles of iron to produce _____ moles of iron (III) oxide.

b. _____ moles of O_2 are required to produce 3.0 moles of iron (III) oxide.