$\qquad$

1. $\mathrm{N}_{2}+3 \mathrm{H}_{2} \rightarrow 2 \mathrm{NH}_{3}$

What volume of hydrogen is necessary to react with five liters of nitrogen
2. What volume of ammonia is produced in the reaction in Problem 1?
(Use 5 L of $\mathrm{N}_{2}$ )
3. $\mathrm{C}_{3} \mathrm{H}_{3}+5 \mathrm{O}_{2} \rightarrow 3 \mathrm{CO}_{2}+4 \mathrm{H}_{2} \mathrm{O}$

If 20 liters of oxygen are consumed in the above reaction, how many liters of carbon dioxide are produced?
4. $2 \mathrm{H}_{2} \mathrm{O} \rightarrow 2 \mathrm{H}_{2}+\mathrm{O}_{2}$

If 30 L of hydrogen are produced in the above reaction, how many iliters of oxygen are produced?
5. $2 \mathrm{CO}+\mathrm{O}_{2} \rightarrow 2 \mathrm{CO}_{2}$

How many liters of carbon dioxide are produced if 75 liters of carbon monoxide are burned
? How many liters of oxygen are necessary?

