

Mole Ratio / Mole-Mole Stoichiometry Worksheet1. Balance the equation and answer the following: $\underline{\hspace{1cm}}\text{N}_2 + \underline{\hspace{1cm}}\text{H}_2 \rightarrow \underline{\hspace{1cm}}\text{NH}_3$ a. If you used 1 mole of N_2 , how many moles of NH_3 could be produced?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$

b. If 10 moles of NH_3 were produced, how many moles of N_2 would be required?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$

c. If 3.00 moles of H_2 were used, how many moles of NH_3 would be made?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$

d. If 0.600 moles of NH_3 were produced, how many moles of H_2 are required?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$

2. For the reaction: $\underline{\hspace{1cm}}\text{P} + \underline{\hspace{1cm}}\text{S} \rightarrow \underline{\hspace{1cm}}\text{P}_2\text{S}_5$

a. How many moles of phosphorus are needed to react with 0.125 moles of sulfur?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$

b. How many moles of phosphorous pentasulfide are produced from 0.081 mol of sulfur in the above reaction?

$$\begin{array}{c} | \\ \hline \underline{\hspace{1cm}} \end{array} =$$