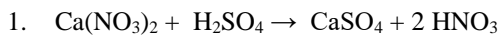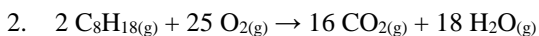Questions to be completed and submitted to work towards <u>credit earned</u> in Chemistry 112.
Please email a picture or scanned copy of your work to Mrs. Arsenault.
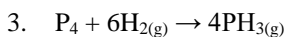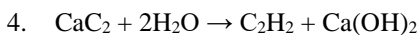

Material covered May 11 – 15

1. $Ca(NO_3)_2 + H_2SO_4 \rightarrow CaSO_4 + 2\ HNO_3$

How many grams of HNO_3 are produced from 6.49×10^{22} molecules of $Ca(NO_3)_2$?

2. $2\ C_8H_{18(g)} + 25\ O_{2(g)} \rightarrow 16\ CO_{2(g)} + 18\ H_2O_{(g)}$

How many molecules of $CO_{2(g)}$ are formed when 0.75L of $O_{2(g)}$ reacts?

3. $P_4 + 6H_{2(g)} \rightarrow 4PH_{3(g)}$

How many liters of $PH_{3(g)}$ are formed when 1.75g of $H_{2(g)}$ reacts?

4. $CaC_2 + 2H_2O \rightarrow C_2H_2 + Ca(OH)_2$

How many molecules of C_2H_2 are produced from 24.75g of CaC_2?
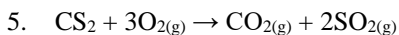
5. $CS_2 + 3O_{2(g)} \rightarrow CO_{2(g)} + 2SO_{2(g)}$
How many liters of $CO_{2(g)}$ are produced when 0.38L of $SO_{2(g)}$ is formed?
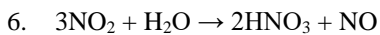
6. $3NO_2 + H_2O \rightarrow 2HNO_3 + NO$
How many grams of NO_2 must react with water to produce 5.00×10^{22} molecules of NO?