Limiting Reactant Homework

1) Calcium hydroxide reacts with nitric acid according to the following *unbalanced* reaction:

 $\underline{\qquad} Ca(OH)_2 + \underline{\qquad} HNO_3 \rightarrow \underline{\qquad} Ca(NO_3)_2 + \underline{\qquad} H_2O$

• If I start with 15 grams of calcium hydroxide and 24 grams of nitric acid, how many grams of calcium nitrate might I expect to form? What is my limiting reactant?

- How much of my excess reactant will be left over when the reaction is complete?
- 2) Lead (II) nitrate reacts with sodium iodide according to the following *unbalanced* equation:

 $_$ Pb(NO₃)₂ + $_$ Nal \rightarrow $_$ Pbl₂ + $_$ NaNO₃

• If I were to perform this reaction with 27 grams of lead nitrate and 82 grams of sodium iodide, how many grams of lead (II) iodide should I be able to form? What is my limiting reactant?

• How much of my excess reactant will be left over when the reaction is complete?