Stoichiometry Part 3: Limiting Reactant and Percent Yield

Consider the following chemical equation to answer the questions.

$$CaCN_{2}(s) + H_{2}O(l) \rightarrow CaCO_{3}(s) + NH_{3}(g)$$

- a) Check to see if the equation is balanced. If not, balance it.
- b) Which is the limiting reagent if 23.25 g of $CaCN_2$ is reacted with 30.00 g of water? (show work)

c) How many grams of CaCO₃ are produced?

d) What is the percent yield if 27.34 g of CaCO3 was recovered?

e) How much water was left unreacted?