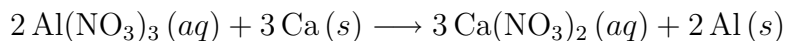


Name: \_\_\_\_\_

Block: \_\_\_\_\_

### Limiting Reactants & Percent Yield

Suppose you add 50.0 g of Ca (molar mass 40.08 g) to 250. g of aqueous  $\text{Al}(\text{NO}_3)_3$  (molar mass 213.01 g), and the following single replacement reaction occurs:



1. Which reagent is limiting?
2. How much of the non-limiting reagent is used? How much is left over?
3. What is the theoretical yield, in grams, of  $\text{Ca}(\text{NO}_3)_2$  (molar mass 164.1 g) produced?
4. If the actual yield of  $\text{Ca}(\text{NO}_3)_2$  was 175 g, what was the percent yield for the reaction?