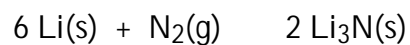
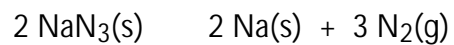


9. (14 points) Consider the production of lithium nitride from its elements:



Calculate the percent yield if 3.456 g of lithium produces 4.980 g of product in excess N_2 .

Extra Credit (no more than 10 points) Consider the decomposition of sodium azide (NaN_3):



How many grams of sodium azide are required to produce 8.36 L of N_2 gas at 22.5 °C and 0.976 atm?