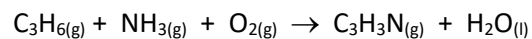


Name: _____

Instructions: Answer each of the following questions to the best of your ability. Use the proper number of significant figures and units wherever appropriate.

1. (5 pts) In the reaction below, what is the percent yield when 10.0g of C₃H₃N is made from 15.0g of C₃H₆ and 10.0g of O₂?



2. (5 pts) A 2.45g sample is decomposed and found to be 48.65% C, 8.17% H, and the rest is oxygen. If the molecular mass is 74.061 g/mole, what is the empirical and molecular formula?