

Participation Assignment

CHEM 1090-General Chemistry I

Name:

#20

Section: 33, TR

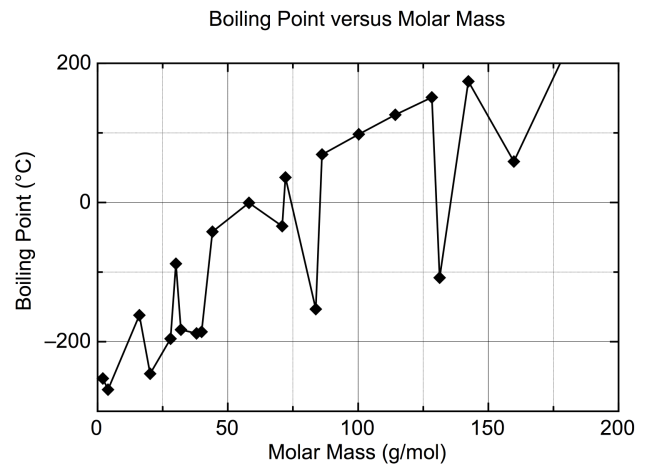
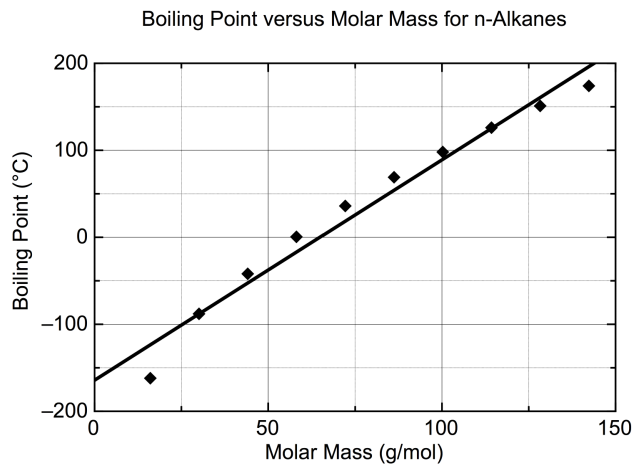
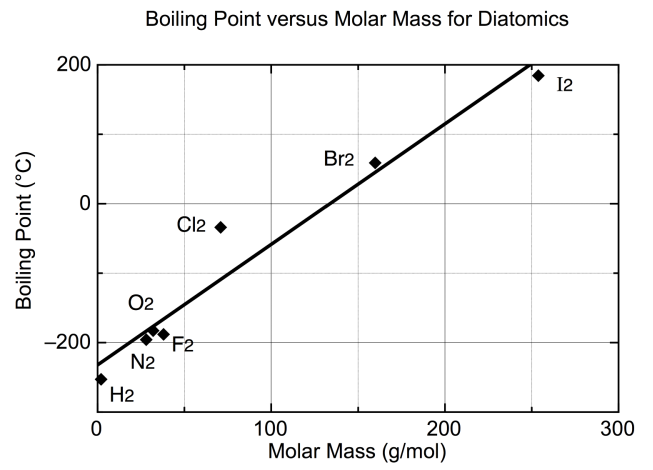
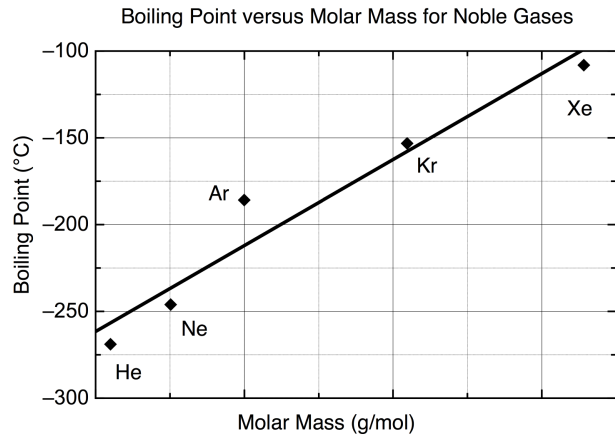
Due Date: Thursday 3/14/2019

1. A balloon is filled with air to a volume of 3500.0 mL at 23 °C. If the air is heated to 46 °C, calculate the new volume in liters.

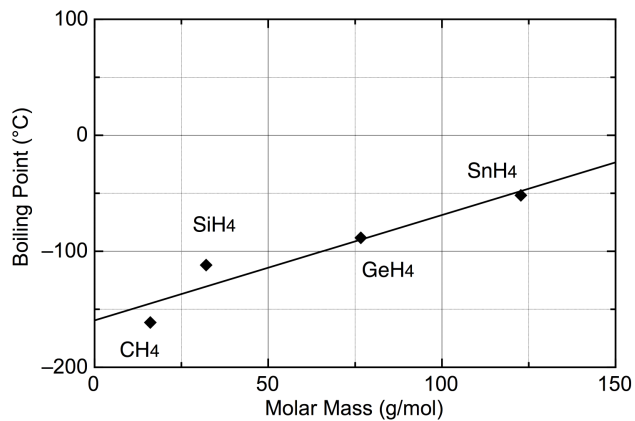
2. A typical propane gas cylinder used in outdoor grills has a volume of approximately 17.8 L. Assume there are 5.60 mol of propane vapor and calculate the temperature in degrees Celsius that is needed to reach 21.0 atm.

3. What is the mole fraction of each component in a gas mixture of 2.55 g of NH_3 , 52.00 g of N_2 , and 13.35 g of H_2 ?

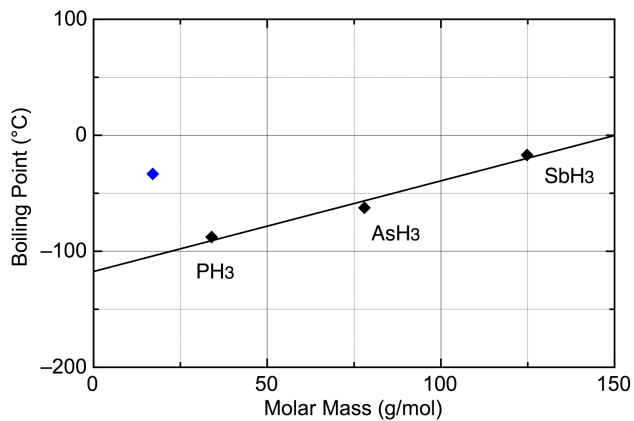
4. What is the total pressure and the pressure of each component (in atm) in a gas mixture of 2.55 g of NH_3 , 52.00 g of N_2 , and 13.35 g of H_2 in a 10.00 L rigid container at 85°C ?



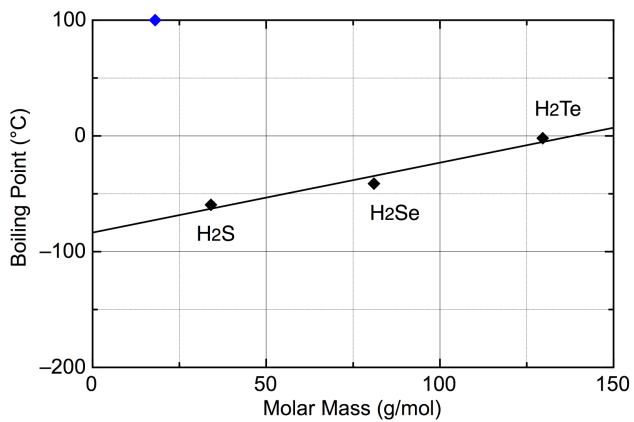
Boiling Point versus Molar Mass for Column 4a



Boiling Point versus Molar Mass for Column 5a



Boiling Point versus Molar Mass for Column 6a



Boiling Point versus Molar Mass for Column 7a

