1. Which gas effuses faster, NH₃ or CCl₄? How much faster does it effuse?

Answer: __________ effuses __________ times faster than __________

2. A large balloon filled with helium gas (occupying 293.1 L at 24.8°C and 769.2 torr) is released. What volume (in L) would the balloon occupy when it reaches an altitude where the conditions are –18.7°C and 383.6 torr?

Answer: ________________

3. A gas in a 975 mL cylinder is at 835 torr. If the gas is compressed by a piston to 225 mL, what is the pressure of the gas (in atm)?

Answer: ________________
4. Hydrogen gas is collected over water at 27.0°C and 748.9 torr. If 3.978 L of gas is collected, how many moles of hydrogen are in the container? (P\textsubscript{H}_2\textsubscript{O} = 26.5 torr at 27.0°C)

Answer: ________________

5. If 0.598 mol N\textsubscript{2}, 0.153 mol O\textsubscript{2}, and 0.079 mol CO\textsubscript{2} are exhaled into a balloon, what volume would the balloon occupy at STP?

Answer: ________________

6. 32.42 mol Gas A, 28.15 mol Gas B, and 19.69 mol Gas C are in a 1799 L chamber at STP. What is the partial pressure of Gas B (in atm)?

Answer: ________________