Chemistry 115 Name

Dr. Cary Willard

Quiz 8a (20 points) April 22, 2010

Must show all work to receive credit. Use proper significant figures.

PV=nRT, R=0.0821 L atm/mol K=62.4 L torr/mol K, 1 atm=760 torr=760 mm Hg

1. (5 points) The pressure at the bottom of mission bay is 4.25 atm, what is that pressure in torr?
2. (5 points) A container is filled with 5.24 L of argon with a pressure of 1.87 atm at 35oC. If the container is heated to 375oC at a constant pressure, what is the new volume of argon in the container?
3. (6 points) An unknown gas has a molar mass of 362 g/mol at 75oC and 1.22 atm. What is the density of the unknown gas?
4. (4 points) Explain why a gas expands to fill its container using kinetic molecular theory.

Chemistry 115 Name

Dr. Cary Willard

Quiz 8b (20 points) April 22, 2010

Must show all work to receive credit. Use proper significant figures.

PV=nRT, R=0.0821 L atm/mol K=62.4 L torr/mol K, 1 atm=760 torr=760 mm Hg

1. (5 points) The pressure at the bottom of mission bay is 5.34 atm, what is that pressure in torr?
2. (5 points) A container is filled with 6.88 L of argon with a pressure of 1.87 atm at 35oC. If the container is heated to 375oC at a constant pressure, what is the new volume of argon in the container?
3. (6 points) An unknown gas has a molar mass of 218 g/mol at 75oC and 1.31 atm. What is the density of the unknown gas?
4. (4 points) Explain why a gas expands to fill its container using kinetic molecular theory.