Unit 6 - Exercise 5 - Density of Gases

1. While in the lab your group collects 180cm^3 of CO_2 from the water and Alka-Seltzer combination. You calculate the mass difference before and after the test to be 0.36 grams. What is the density of the CO_2 gas?

2. How much space would 10 grams of the CO_2 gas fill?

3. While you are working in a chemical laboratory you discover that it has caught on fire. The hot gases from the blaze have a density of .0008 g/cm^3. The density of air is approximately .0012 g/cm^3. What method would be best for your exit from the burning building? Explain your answer.

4. What is the density of a gas (in g/cm^3) if a 3.0 gram sample occupies a volume of 1.0 m^3?