COMBINED GAS LAWS

Name _____

1. If 53.5 mL of gas is collected at a temperature of 12° C, what will the volume be at 25° C? Assume constant pressure.

2. A gas occupies a volume of 2032 mL at a pressure of 720 mm Hg. At what pressure will the gas occupy at 300 mL? Assume constant temperature.

3. A man is selling gases at a price of \$.50 a milliliter. He collects 720 mL of gas at 18⁰C and 790 mm of pressure. What is the volume of the gas at STP? How much would he charge for the gas?

4. A volume of gas occupies 76 mL when the pressure is 800 mm and the temperature is 10^oC. What volume will this gas occupy at 15^oC and 790 mm of pressure?

5. A man is using a eudiometer to produce gas. He collects 503 mL of gas when the temperature is 18^oC and the barometric pressure is 810 mm. If the level inside the tube is 150 mm higher than the outside of the tube, what is the volume of the gas at STP?

6. At a temperature of 25^oC, 53 mL of gas was collected in a eudiometer. The barometric pressure was 740 mm, and the level inside the tube was 10 mm lower than the outside of the tube. What would this gas occupy at 15^oC and 760 mm of pressure?

7. 80 mL of a gas is collected at 780 mm of barometric pressure and 25⁰C in a eudiometer. If the level of gas inside is 15 mm higher than the outside, what would this gas occupy at STP?

8. 75 mL of gas is collected at 700 mm of pressure when the temperature is 30° C. If the level inside the tube is equal to the outside, what does this gas occupy at 10° C and 780 mm of pressure?