

## COMBINED GAS LAWS

Name \_\_\_\_\_

1. If 53.5 mL of gas is collected at a temperature of  $12^{\circ}\text{C}$ , what will the volume be at  $25^{\circ}\text{C}$ ? 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  $18^{\circ}\text{C}$  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  $10^{\circ}\text{C}$ . What volume will this gas occupy at  $15^{\circ}\text{C}$  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  $18^{\circ}\text{C}$  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?

