**Gay-Lussac'sLaw** - **At constant V, P is <u>directly</u> related to T.**

$$\frac{P_1}{T_1} = \frac{P_2}{T_2}$$

1) If the Kelvin temperature of a gas is <u>doubled</u>, at constant volume, what will happen to its pressure?

2) A gas, in a 100 ml rigid container, exerts 300 kPa at 10°C. What will be its pressure at 20 °C?

**<u>HW</u>**

**1) What is the meaning of a "direct" relationship?**

**2)  At constant volume, what happens to the pressure of a gas if its Kelvin temperature is tripled?**

**3) How does the Kinetic Molecular Theory explain Gay-Lussac's Law?**

**4) In a rigid container, a gas sample at 25°C exerts 0.5 atm of pressure. At what temperature will its pressure rise to 1.5 atm?**

**5) A corked test tube containing 15.0 ml of air at STP (see reference table A) is heated to 100 °C. What is the new pressure of the gas in kPa?**