**Boyle’s Law**

1. If a gas at 25.0 °C occupies 3.60 liters at a pressure of 1.00 atm, what will be its volume at a pressure of 2.50 atm?

**Charles’ Law**

1. Calculate the decrease in temperature when 2.00 L at 20.0 °C is compressed to 1.00 L

**Gay-Lussac’s Law**

1. Determine the pressure change when a constant volume of gas at 1.00 atm is heated from 20.0 °C to 30.0 °C.

**Avogadro's Law**

1. A cylinder with a movable piston contains 2.00 g of helium, He, at room temperature. More helium was added to the cylinder and the volume was adjusted so that the gas pressure remained the same. How many grams of helium were added to the cylinder if the volume was changed from 2.00 L to 2.70 L? (The temperature was held constant.)

**Ideal Gas Law**

1. Determine the number of grams of carbon dioxide in a 450.6 milliliter tank at 1.80 atm and -50.5 °C. Determine the number of grams of oxygen that the same container will contain under the same temperature and pressure.