A sample of hydrogen gas occupies 9 liters at a pressure of 400 torr. What volume does the gas occupy when the pressure is increased to 600 torr?

At a temperature of 27°C, a sample of nitrogen gas occupies a volume of 4 liters. At what temperature does the sample have a volume of 6 liters?

A container of helium exerts a pressure of 1.2 atmospheres at a temperature of -73° C. What pressure does the gas exert at 127°C?

A 400 mL sample of oxygen exerts a pressure of 2 atmospheres when the temperature is -23 °C. What volume does the gas occupy when the pressure is decreased to 0.5 atmospheres and the temperature is increased to 227°C?