

Answer on Question #70249 - Chemistry - General Chemistry

Question:

124ml bubble of hot gas initially at 212°C and 1.80atm. What is the final temperature in degrees Celsius if the fin volume of the bubble is 138 mL and the pressure is 0.800atm. the amount of gas does not change

Solution:

According to the combined gas law, the following relationship between temperature, pressure and volume is constant:

Thus, it is easy to find the final temperature, taking into account Kelvin-Celsius conversion:

Answer: -33.2°C