Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the pressure of 4.00 mol of an ideal gas which is contained in rigid container if at the same temperature 2.00 mol of gas would generate 5.0 atm of pressure in this same container.

ANS: _____ atm

Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the final container volume needed to compress an ideal gas to 6.0 atm if before the compression was in a 4.0 gallon container at 1.5 atm.

ANS: _____ gallons

Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the temperature in °C of an ideal gas which is initially contained in a rigid container at 15.2 psi at 25°C if the final require pressure is 25 psi.

ANS: _____ °C

Critical Question #9

Note that 0°C = +273.17 K

Name _____

The pressure inside a rigid container was raised from 27 torr to 75 torr at constant temperature by pumping in more ideal gas. If initially there was 10.0 moles of gas in the container, how many moles were there in the container after the additional gas?

ANS: _____ moles

Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the pressure of 5.00 mol of an ideal gas which is contained in rigid container if at the same temperature 2.00 mol of gas would generate 5.0 atm of pressure in this same container.

ANS: _____ atm

Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the final container volume needed to compress an ideal gas to 6.0 atm if before the compression the gas was in a 4.0 gallon container at 2.5 atm.

ANS: _____ gallons

Critical Question #9

Note that 0°C = +273.17 K

Name _____

Calculate the temperature in °C of an ideal gas which is initially contained in a rigid container at 15.2 psi at 25°C if the final require pressure is 35 psi.

ANS: _____ °C

Critical Question #9

Note that 0°C = +273.17 K

Name _____

The pressure inside a rigid container was raised from 5.5 torr to 75 torr at constant temperature by pumping in more ideal gas. If initially there was 10.0 moles of gas in the container, how many moles were there in the container after the additional gas?

ANS: _____ moles