## Quiz 7.1 – Gas Laws

Name:
Problem 1 (1 point)
A gas occupies $2.50~L$ at $0.95~atm$ of pressure and a temperature of $274.5~K$ . After a change in $P,V$ , and $T$ the new volume is $5.45~L$ and the new pressure is $0.67~atm$ . What is the new temperature?
Problem 2 (2 points)
A gas occupies $1.75~L$ at $1.24~atm$ of pressure and a temperature of $12.4^{\circ}C$ . After a change in $P$ , $V$ , and $T$ the new volume is $1.38~L$ and the new temperature is $53.5^{\circ}C$ . What is the new pressure?
Problem 3 (2 points)
How many moles of gas are in each of the two gas samples from Problem 1 and Problem 2

## **Pioneers**

## By Carol Lynn Pearson

My people were Mormon pioneers. Is the blood still good? They stood in awe as truth Flew by like a dove And dropped a feather in the West. Where truth flies you follow If you are a pioneer. I have searched the skies And now and then Another feather has fallen. I have packed the handcart again Packed it with the precious things And thrown away the rest. I will sing by the fires at night Out there on uncharted ground Where I am my own captain of tens Where I blow the bugle Bring myself to morning prayer Map out the miles And never know when or where Or if at all I will finally say, "This is the place," I face the plains On a good day for walking. The sun rises And the mist clears. I will be all right: My people were Mormon Pioneers.