# **CHEM 1105: ABSOLUTE ZERO**

Name:	Date:	Section	
Objective			
Objective:			
Procedure:			
As in Kwantlen Che	emistry 1105 lab manual, pa	ges	
Observations			

### Data

**Table 1. Capillary Tube Data.** 

Reading number	Water Temperature	Column length
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

clearly which points were used for determining the slope.
Calculations:
Show all your calculations
Discussion
Write a short paragraph discussing your results. For what to include in a discussion see your lab manual.
Conclusion:
Questions

Graph

Attach any assigned questions.

# **CHEM 1105: IDEAL GAS CONSTANT**

Name:	Date:	Section	
Objective:			
Procedure:			
As in Kwantlen (	Chemistry 1105 lab manual, pag	es	
Observations			

### Data

Table 1. KClO<sub>3</sub> decomposition data

	Run 1	Run 2
Mass of test tube and mixture before heating		
Mass of test tube and mixture after heating		
Mass of beaker and water after reaction		
Mass of beaker		
Temperature of water in the flask after reaction		
Vapour pressure of water at that temperature		
Atmospheric pressure		

# **Calculations:**

1. The mass of O<sub>2</sub> produced

2. The moles of O<sub>2</sub> produced

3. The mass of water expelled

4. The volume of water expelled (assume a density of 0.997 g/mL)

5. The temperature of the solution (in degrees Kelvin)

6. The pressure of the  $O_2$  gas in atmospheres

7. The value of R, from PV = nRT

Discussion
Write a short paragraph discussing your results. For what to include in a discussion see your lab manual.
Conclusion:
Questions
Attach any assigned questions