

## DETERMINATION OF ABSOLUTE ZERO

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Partner: \_\_\_\_\_

**Objective:** To determine Absolute Zero

**Procedure:** As in CHEM 1105 lab manual, pages \_\_\_\_\_.

**Observations:**

**Data:**

**Table 2: Height of Column of Air and Temperature**

Reading Number	Height of Column of Air (mm)	Water Temperature (°C)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

**Calculations:**

- 1) Attach a graph made in **Graphical Analysis or Excel** of **Column Height** (mm) versus **Temperature** (°C).
- 2) The temperature that corresponds to absolute zero will be the one for which the column length is zero. Determine the slope and y-intercept of the line and using the equation  $y=mx + b$  determine the value of Absolute Zero.
  
- 3) Show all your calculations for the slope and y-intercept when determining Absolute Zero.

**Conclusion:****Table 3: Absolute Zero Results**

	<b>Slope</b>	<b>Y-Intercept</b>	<b>Absolute Zero</b>
<b>Value determined</b>			
<b>Units</b>			

