Graphing Practice Problem #2

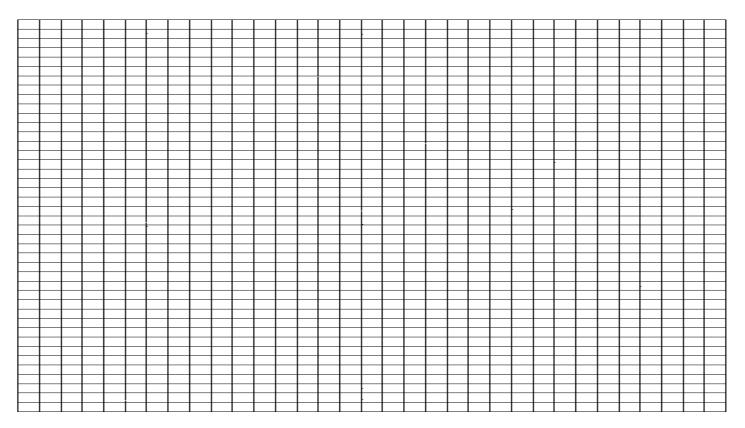
The volume of a gas decreases as the temperature of the gas decreases. A sample of gas was collected at 100 degrees Celsius and then cooled down. The changes in the volume of the sample are shown below...

Make a graph of the data (make sure independent variable is on the x - axis)
Make a second graph which will allow you to extrapolate data to reach a gas volume of 0 ml.

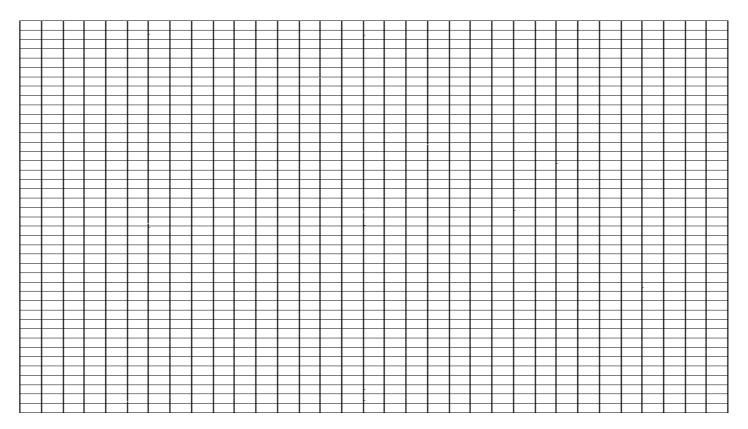
3.) The temperature at which the volume of the gas reaches zero is the theoretical temperature of Absolute Zero. From this graph, what is the Celsius Temperature for Absolute Zero Volume?

| Temperature (°C) | Volume (ml) |
|------------------|-------------|
| 100 | 317 |
| 80 | 297 |
| 60 | 288 |
| 40 | 278 |
| 30 | 252 |
| 20 | 243 |
| 10 | 236 |
| 0 | 233 |
| -10 | 227 |
| -30 | 202 |

1.) Make a graph of the data



2.) Make a second graph which will allow you to extrapolate data to reach a gas volume of 0 ml.



3.) The temperature at which the volume of the gas reaches zero is the theoretical temperature of Absolute Zero. From this graph, what is the Celsius Temperature for Absolute Zero Volume?