Graphing Practice

Prepare line graphs for the following data. You *must* use a computer to prepare and print your graphs!

1. Bonnie and Clyde were repeating our density of water lab using mercury instead. Use their data to make a graph and determine the density of mercury:

Volume (mL)	Mass (g)
2.0	27.2
4.0	54.4
6.0	81.5
8.0	108.7
10.0	135.9
12.0	163.1
14.0	190.3
16.0	217.4
18.0	244.6
20.0	271.8

2. Louis and Clark were trying to determine how quickly a beaker of hot water would cool to room temperature. So they boiled some water, turned off the heat and began taking its temperature every minute. This turned out to be just a bit more exciting than watching paint dry, but not by much. The table below shows some of their data. Graph their data and find the rate at which the water was cooling in degrees Celsius per minute.

Time (min)	Temperature (°C)
5.0	78.5
6.0	76.8
7.0	75.0
8.0	73.3
9.0	71.6
10.0	69.8
11.0	68.1
12.0	66.4
13.0	64.6
14.0	62.9
15.0	61.2
16.0	59.5
17.0	57.7
18.0	56.0
19.0	54.3
20.0	52.5

3. Lucy and Ricky measured the position of a rolling ball as a function of time. Make a line graph of their data. Can you predict the position of the ball at 10 seconds? [Note: your data does not follow a straight line. What kind of curve does it look to be?]

Time (s)	Position (m)
0.0	10.0
0.5	19.3
1.0	27.0
1.5	33.3
2.0	38.0
2.5	41.3
3.0	43.0
3.5	43.3
4.0	42.0
4.5	39.3
5.0	35.0
5.5	29.3
6.0	22.0
6.5	13.3
7.0	3.0

4. Fred and Wilma were playing around with a balloon one day and somehow came up with the following data. Make a graph and use it to find the volume the balloon would have at a pressure of 15 kPa. [Note: your data does not follow a straight line. What kind of curve does it look to be?]

Pressure (kPa)	Volume (cm^3)
5.0	96.0
10.0	48.0
20.0	24.0
30.0	16.0
40.0	12.0
50.0	9.6
60.0	8.0
70.0	6.9
80.0	6.0
90.0	5.3
100.0	4.8