http://staff.tuhsd.k12.az.us/gfoster/standard/bgraph6.htm

Graphing Practice Problem #1

Amount of ethylene in ml/m^2	Wine sap Apples: Days to Maturity	Golden Apples: Days to Maturity	Gala Apples: Days to Maturity
10	14	14	15
15	12	12	13
20	11	9	10
25	10	7	9
30	8	7	8
35	8	7	7

A. Ethylene is a plant hormone that causes fruit to mature. The data above concerns the amount of time it takes for fruit to mature from the time of the first application of ethylene by spraying a field of trees.
B. Make a line graph of the data.
C. What is the dependent variable?
D. What is the independent variable?

Graphing Practice Problem #2

Age of the tree in years	Average thickness of the annual rings in cm. Forest A	Average thickness of the annual rings in cm. Forest B
10	2.0	2.2
20	2.2	2.5
30	3.5	3.6
35	3.0	3.8
50	4.5	4.0
60	4.3	4.5

A. The thickness of the annual rings indicate what type of environmental situation was occurring at the time of its development. A thin ring, usually indicates a rough period of development. Lack of water, forest fires, or a major insect infestation. On the other hand, a thick ring indicates just the opposite.
B. Make a line graph of the data.
C. What is the dependent variable?
D. What is the independent variable?
E. What was the average thickness of the annual rings of 40 year old trees in Forest A?
F. Based on this data, what can you conclude about Forest A and Forest B?

Graphing Practice Problem #3

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. The changes in the volume of the sample are shown below.

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

A. Graph the data.
B. Construct another graph that will allow you to extrapolate *(extend the graph beyond measured data)* the graph to reach a gas volume of 0 ml. 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?