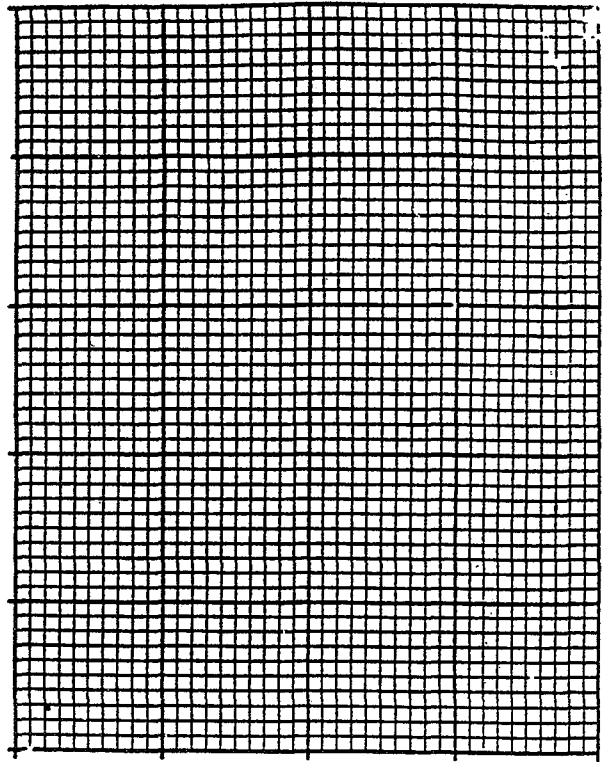


1) Graph the data from the chart below on the graph to the right. The data shows the temperature of a sample of water as it was heated in a solar panel.

	A	B
1	Time (hours)	Temp (°C)
2	0	28
3	1	42
4	2	50
5	5	56
6	6	61
7	7	65
8	8	68
9	10	72



- Create an appropriate scale on each axis
- Label each axis including units
- Title the graph
- Plot the data and construct the line

2) In the box below calculate the rate of change in temperature for the first 8 hours from the data shown above. Do the following

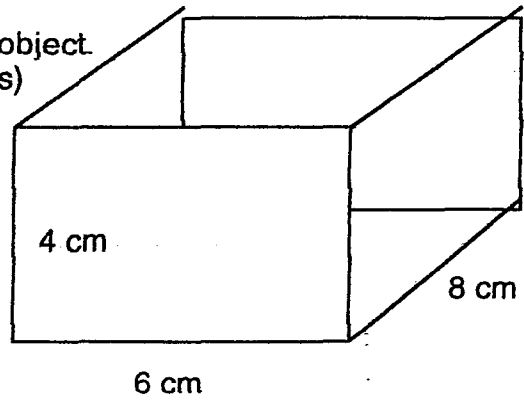
- Write complete formula
- substitute data into equation (including units)
- solve with units

3) In one or more complete sentences describe the type of relationship illustrated in the graph above.

In one or more complete sentences describe what happens to the density of the water as it heated.

5) The diagram to the right shows a block of uniform material that has a density of 4 g/cm^3 .

a) In the space below calculate the volume of the solid object. (Write formula, substitute data with units, solve with units)



b) In the space below calculate the mass of the sample shown above. Use your calculated volume in step a to find this value. (Write formula, substitute data with units, solve with units)

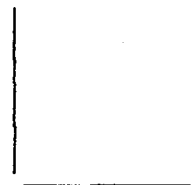
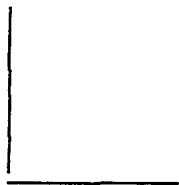
6) On the graphs shown below sketch the following types of relationships

Direct

Inverse

Constant

Cyclic



7) If the object in question 5 was cut in half, how would the mass, volume, and density of one of the pieces compare to the original? Answer in complete sentences on the lines below.
