**1** (a) Temperature can be measured using different scales.

Complete the table by inserting the missing temperatures.

**(2)**

| Temperature | Boiling point of liquid nitrogen | Boiling point of water |
|---|---|---|
| in °C | | 100 |
| in Kelvin | 77 | |

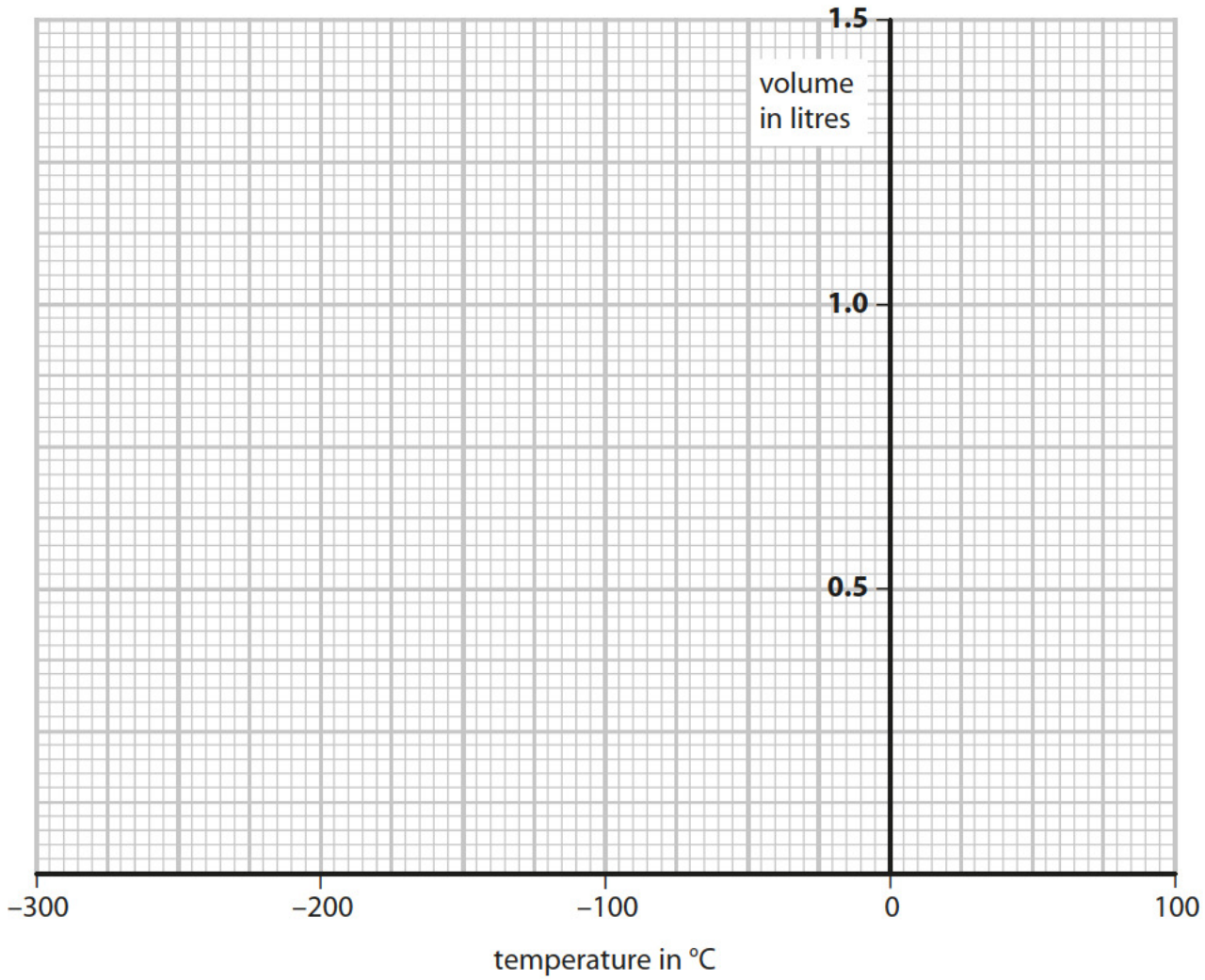
(b) Some students measure the volume of a sample of gas at different temperatures.

The table below shows their results.

| Temperature in °C | Volume in litres |
|---|---|
| – 20 | 0.95 |
| 0 | 0.85 |
| 50 | 1.20 |
| 80 | 1.30 |
| 100 | 1.40 |

(i) Draw a graph to show how the volume of gas varies with temperature.

**(3)**




(ii) Circle the anomalous point on your graph.

**(1)**

(iii) Use your graph to find the temperature of the gas when its volume is zero.

**(1)**

temperature = ..... °C

**(Total for Question 1 = 7 marks)**