

Example 1

An experiment was set up to investigate the variation of the specific heat of a certain chemical with temperature. Two measurements of the specific heat were taken at each of a series of temperatures. The following results were obtained.

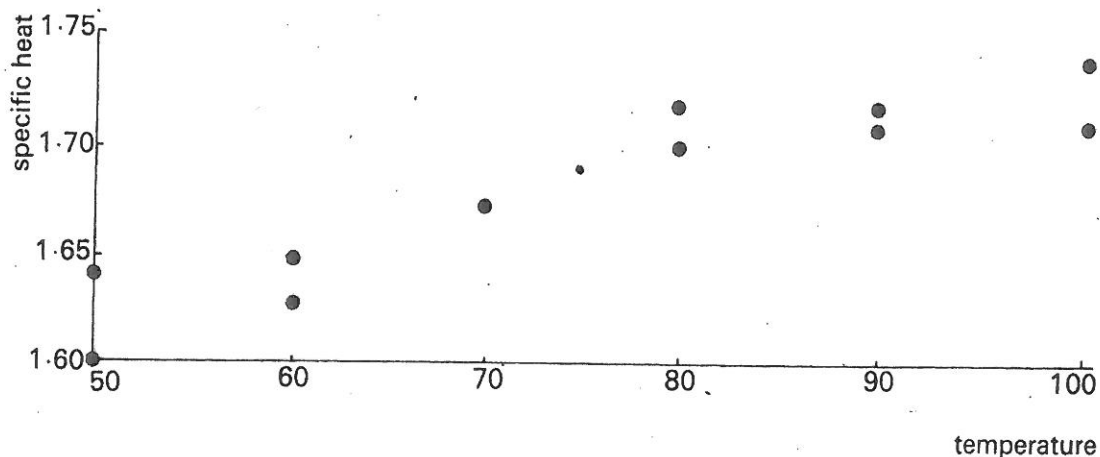


Figure 41 Scatter diagram of data of Example 1

| Temperature °C | 50 | 60 | 70 | 80 | 90 | 100 |
|----------------|------|------|------|------|------|------|
| Specific heat | 1.60 | 1.63 | 1.67 | 1.70 | 1.71 | 1.71 |
| | 1.64 | 1.65 | 1.67 | 1.72 | 1.72 | 1.74 |