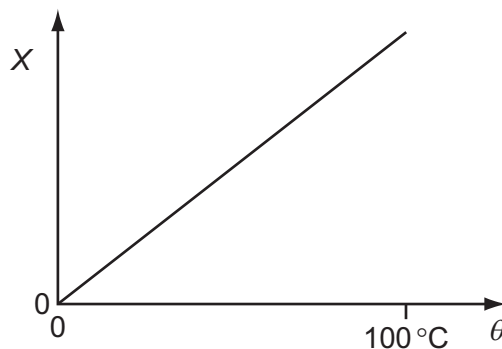


- 6 A quantity X varies with temperature θ as shown.



θ is determined from the corresponding values of X by using this graph.
 X is measured with a percentage uncertainty of $\pm 1\%$ of its value at all temperatures.

Which statement about the uncertainty in θ is correct?

- A The percentage uncertainty in θ is least near 0°C .
 - B The percentage uncertainty in θ is least near 100°C .
 - C The actual uncertainty in θ is least near 0°C .
 - D The actual uncertainty in θ is least near 100°C .
- 7 The measurement of a physical quantity may be subject to random errors and to systematic errors.

Which statement is correct?

- A Random errors can be reduced by taking the average of several measurements.
- B Random errors are always caused by the person taking the measurement.
- C A systematic error cannot be reduced by adjusting the apparatus.
- D A systematic error results in a different reading each time the measurement is taken.

Space for working