4 The resistance of a lamp is calculated from the value of the potential difference (p.d.) across it and the value of the current passing through it.

Which statement correctly describes how to combine the uncertainties in the p.d. and in the current?

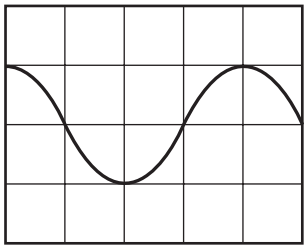
A Add together the actual uncertainty in the p.d. and the actual uncertainty in the current.

B Add together the percentage uncertainty in the p.d. and the percentage uncertainty in the current.

C Subtract the actual uncertainty in the current from the actual uncertainty in the p.d.

D Subtract the percentage uncertainty in the current from the percentage uncertainty in the p.d.

5 The display on a cathode-ray oscilloscope shows the signal produced by an electronic circuit. The time-base is set at 5.0 ns per division and the Y-gain at 10 V per division.



What is the frequency of the signal?

A 2.0×10^{-8} Hz

B 2.5×10^{-2} Hz

C 5.0×10^{7} Hz

D 3.1×10^{8} Hz

Space for working