

**4** A student is investigating an electrical signal using a cathode-ray oscilloscope (c.r.o).

The frequency of the signal is 50 kHz.

Which time-base setting on the oscilloscope should be used?

**A**  $50 \text{ ms cm}^{-1}$

**B**  $1 \text{ ms cm}^{-1}$

**C**  $10 \mu\text{s cm}^{-1}$

**D**  $0.5 \mu\text{s cm}^{-1}$

**E** A student wishes to measure a distance of about 10 cm to a precision of 0.01 cm.