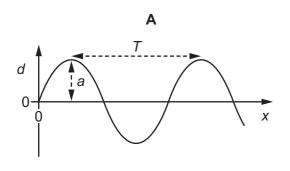
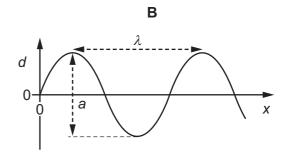
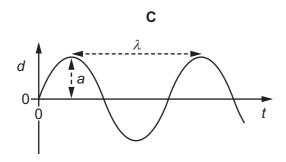
21 The four graphs represent a progressive wave on a stretched string. Graphs **A** and **B** show how the displacement *d* varies with distance *x* along the string at one instant. Graphs **C** and **D** show how the displacement *d* varies with time *t* at a particular value of *x*.

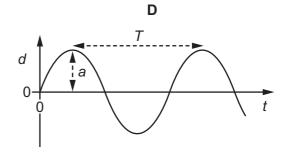
The labels on the graphs are intended to show the wavelength  $\lambda$ , the period T and the amplitude a of the wave, but only one graph is correctly labelled.

Which graph is correctly labelled?



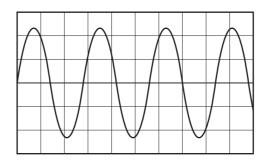






22 A cathode-ray oscilloscope (c.r.o.) is used to determine the frequency of a sound wave.

The diagram shows the waveform on the screen.



The time-base setting is 5.0 ms/div.

What is the frequency of the sound wave?

- **A** 57 Hz
- **B** 71 Hz
- **C** 114 Hz
- **D** 143 Hz