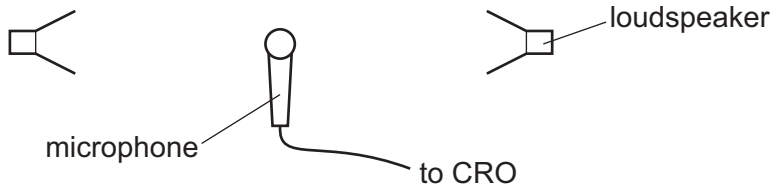


- 29** Two loudspeakers are connected to the same signal generator. The signal generator produces a single frequency. The loudspeakers face each other so that a stationary sound wave is set up in the region between the loudspeakers.



A microphone is connected to a cathode-ray oscilloscope (CRO) and positioned between the two loudspeakers.

The microphone is moved along a line joining the two loudspeakers.

The signal on the CRO shows 5 maximum amplitudes as the microphone moves. The microphone moves a distance of 2.0 m from the position that gives the first maximum to the position that gives the fifth maximum.

What is the wavelength of the sound wave?

- A** 0.40 m      **B** 0.50 m      **C** 0.80 m      **D** 1.0 m