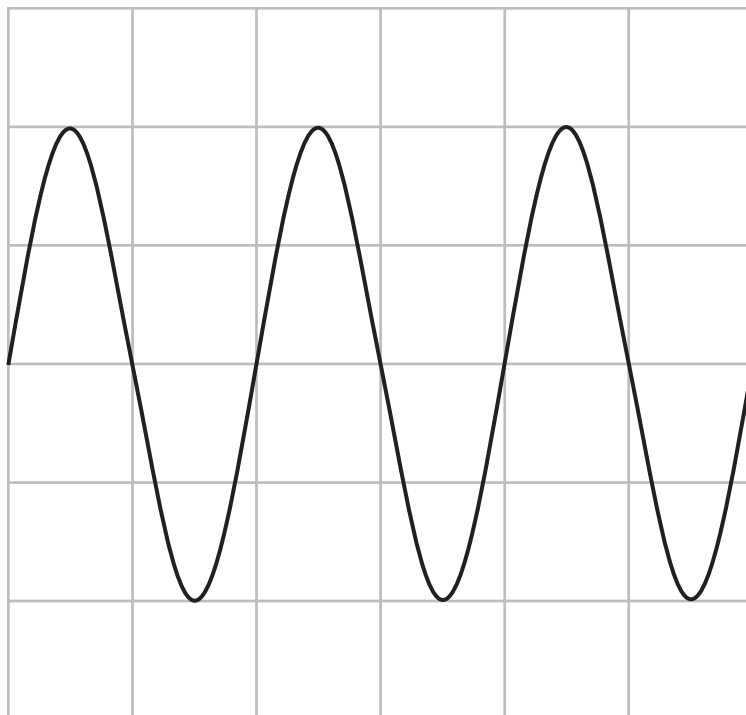


- 2 A microphone is connected to an oscilloscope to display a sound wave.

The diagram shows the trace on the oscilloscope screen.



The oscilloscope settings are:

Y direction: 1 square = 1 V

X direction: 1 square = 0.001 s

- (a) (i) How many time periods are shown on the trace?

(1)

-
- (ii) What is the frequency of the sound wave?

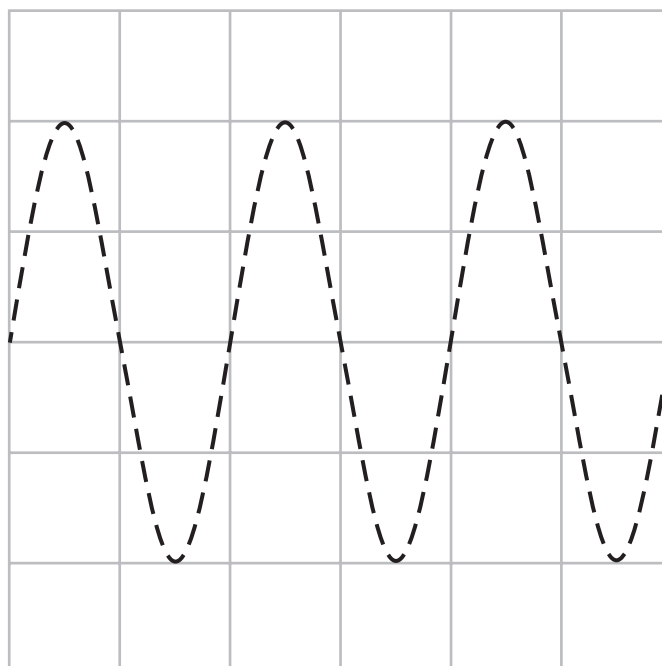
(2)

Frequency = Hz



- (b) On the grid below, sketch the trace of a sound wave with a smaller amplitude and a higher frequency than the wave shown by the dotted line.

(2)



(Total for Question 2 = 5 marks)

