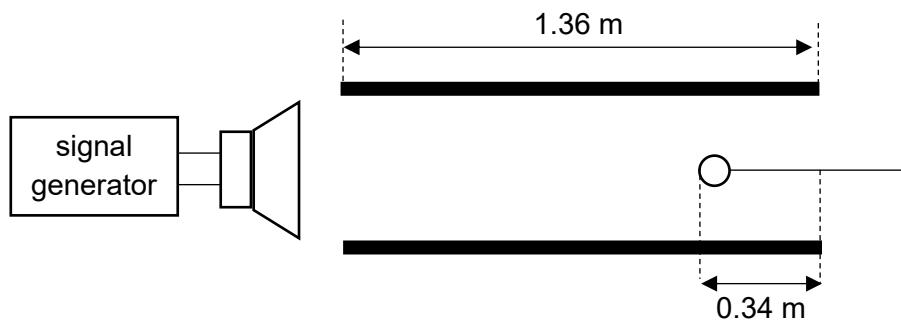


- 17 A speaker connected to a signal generator is placed in front of an open tube of length 1.36 m. A small microphone is inserted inside the tube. It detects the first position with zero intensity at a distance of 0.34 m from the end. The microphone is then fixed in this position. The speed of sound in the tube is  $340 \text{ ms}^{-1}$ .



The frequency of the signal generator is now increased until the microphone again detects zero intensity.

What is this new frequency?

- A 750 Hz
- B 1000 Hz
- C 1500 Hz
- D 3000 Hz