

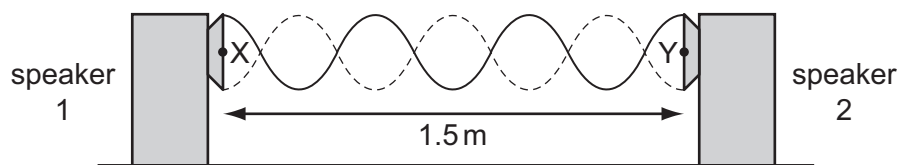
22 A student writes some statements about solids, liquids and gases.

- 1 Solids are rigid because the molecules in a solid vibrate.
- 2 Liquids flow because the molecules in a liquid are closer than in a gas.
- 3 Gases are less dense than liquids because the molecules in a gas move randomly.

Which statements are correct?

- A** 1 only
B 1 and 3 only
C 2 and 3 only
D none of the above

23 A stationary wave is produced by two loudspeakers emitting sound of the same frequency.



When a microphone is moved between X and Y, a distance of 1.5 m, six nodes and seven antinodes are detected.

What is the wavelength of the sound?

- A** 0.50 m **B** 0.43 m **C** 0.25 m **D** 0.21 m

Space for working