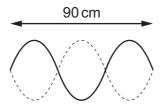
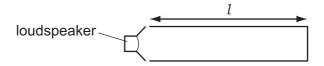
28 The diagram shows a stationary wave on a string at two instants of maximum vertical displacement.



The frequency of the wave is 12 Hz.

What is the speed of the wave?

- **A**  $3.6 \,\mathrm{m \, s^{-1}}$
- **B**  $7.2 \,\mathrm{m \, s}^{-1}$
- $C 360 \,\mathrm{m \, s^{-1}}$
- **D**  $720 \,\mathrm{m \, s^{-1}}$
- **29** A loudspeaker emitting sound of frequency *f* is placed at the open end of a pipe of length *l* which is closed at the other end. A standing wave is set up in the pipe.



A series of pipes are then set up with either one or two loudspeakers of frequency *f*. The pairs of loudspeakers vibrate in phase with each other.

Which pipe contains a standing wave?

