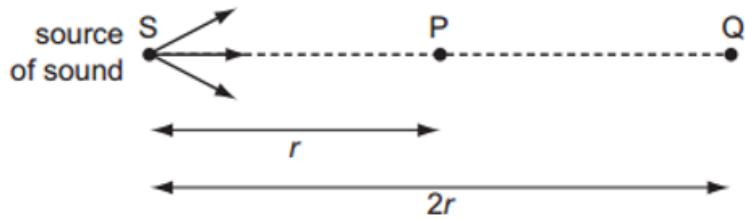


- 15 A point source S is emitting sound waves in all directions.



Air molecules at P, a distance r from S, oscillate with amplitude $8.0 \mu\text{m}$. Point Q is situated a distance $2r$ from S.

What is the amplitude of oscillation of air molecules at Q?

- A** $1.4 \mu\text{m}$
- B** $2.0 \mu\text{m}$
- C** $2.8 \mu\text{m}$
- D** $4.0 \mu\text{m}$

