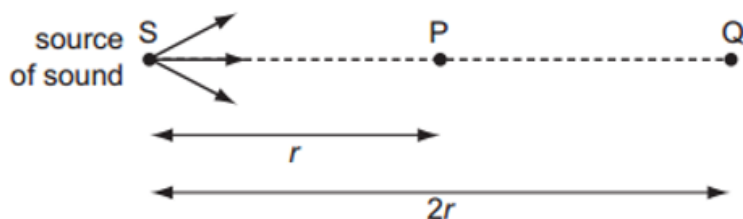


- 15 A point source S is emitting sound waves in all directions.



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  $4.0\ \mu\text{m}$

