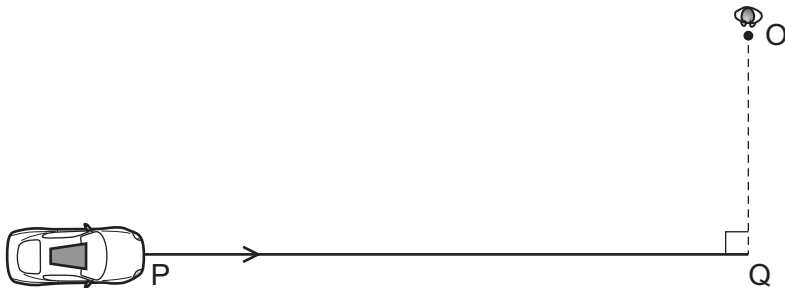


**22** A car travels at a constant speed along a straight line PQ.

A loudspeaker attached to the car emits sound of constant frequency  $f$ . A stationary observer is at point O.



What does the observer hear as the car moves from P towards Q?

- A** a frequency less than  $f$  that decreases as the car moves from P towards Q
- B** a frequency less than  $f$  that increases as the car moves from P towards Q
- C** a frequency more than  $f$  that decreases as the car moves from P towards Q
- D** a frequency more than  $f$  that increases as the car moves from P towards Q