

- 22 Two coherent sources of sound  $S_1$  and  $S_2$  give rise to a minimum loudness at point P and a maximum loudness at point Q.

$S_1$  •

• P (minimum loudness)

• Q (maximum loudness)

$S_2$  •

The amplitude of the sound produced by  $S_2$  is reduced. The frequency of the sound produced by both sources is unchanged.

What happens to the loudness of the sound at P and at Q?

	loudness at P	loudness at Q
<b>A</b>	decreases	decreases
<b>B</b>	increases	decreases
<b>C</b>	increases	no change
<b>D</b>	no change	no change