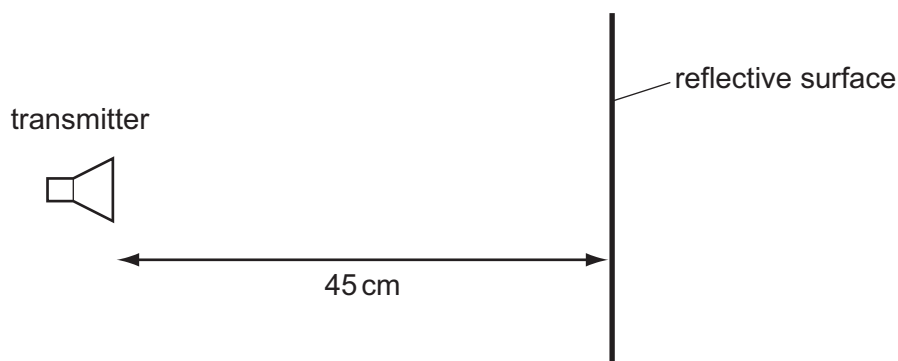


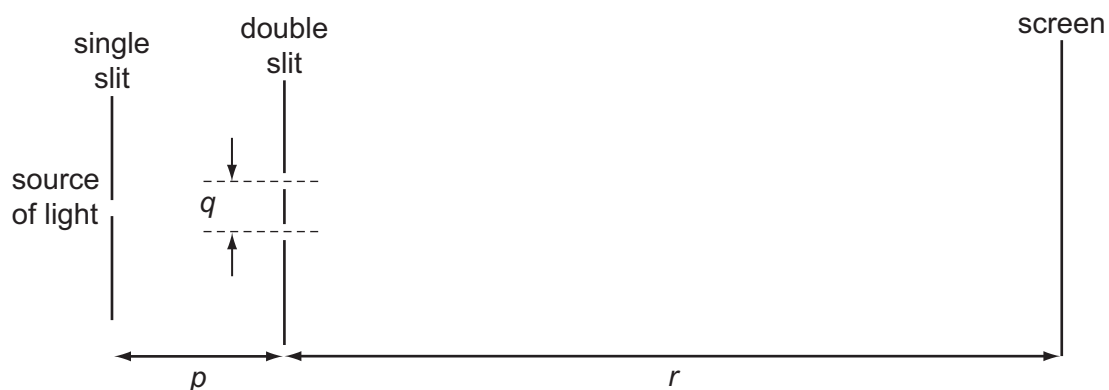
- 27 A transmitter of electromagnetic waves is placed 45 cm from a reflective surface.



The emitted waves have a frequency of 1.00 GHz. A stationary wave is produced with a node at the transmitter and a node at the surface.

How many antinodes are in the space between the transmitter and the surface?

- A** 1                      **B** 2                      **C** 3                      **D** 4
- 28 A teacher sets up the apparatus shown to demonstrate a two-slit interference pattern on the screen.



Which change to the apparatus will increase the fringe spacing?

- A** decreasing the distance  $p$
- B** decreasing the distance  $q$
- C** decreasing the distance  $r$
- D** decreasing the wavelength of the light

**Space for working**