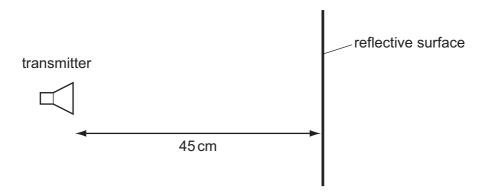
27 A transmitter of electromagnetic waves is placed 45 cm from a reflective surface.

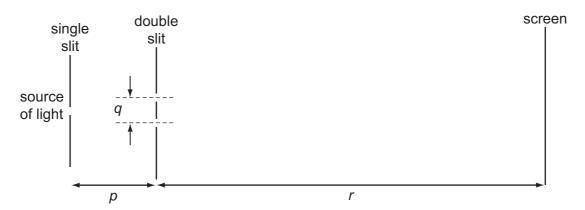


The emitted waves have a frequency of 1.00 GHz. A stationary wave is produced with a node at the transmitter and a node at the surface.

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