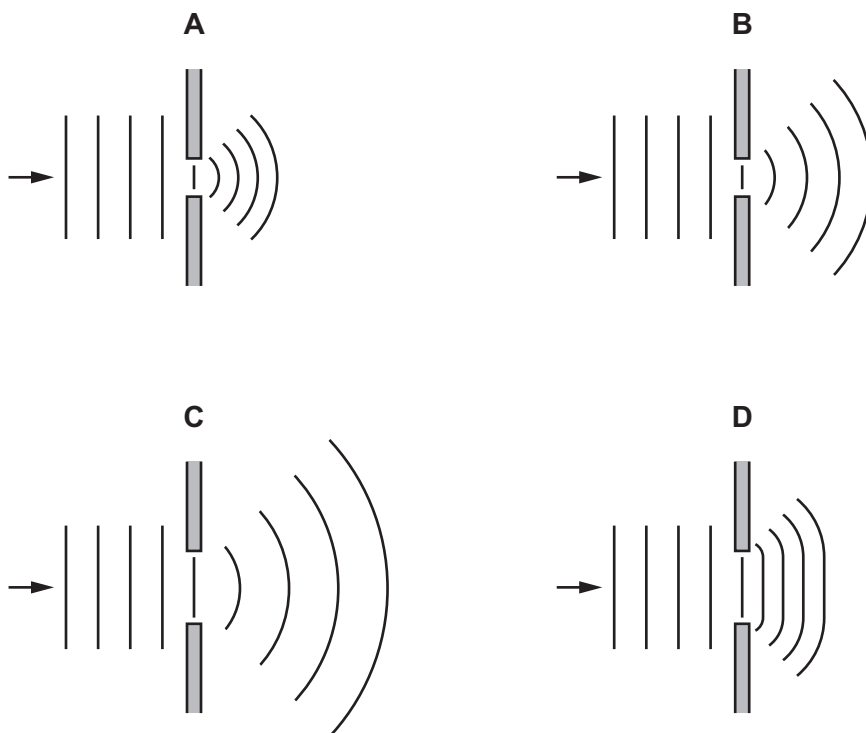
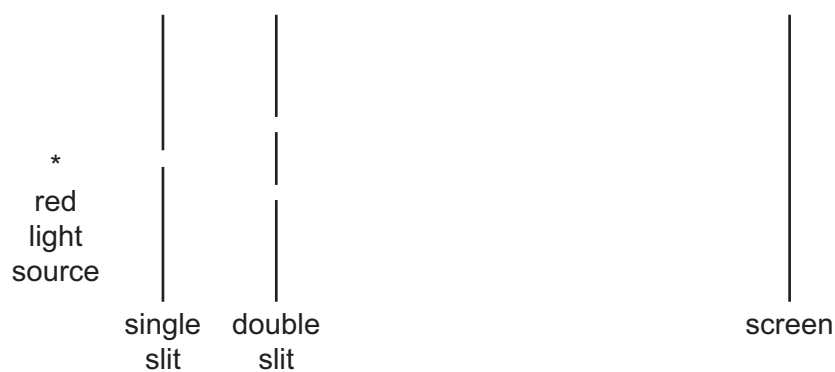


- 28** The diagrams show the diffraction of water waves in a ripple tank as they pass through a gap between two barriers.

Which diagram is correct?



- 29** A double-slit interference experiment is set up as shown.



not to scale

Fringes are formed on the screen. The distance between successive bright fringes is found to be 4 mm.

Two changes are then made to the experimental arrangement. The double slit is replaced by another double slit which has half the spacing. The screen is moved so that its distance from the double slit is twice as great.

What is now the distance between successive bright fringes?

- A** 1 mm      **B** 4 mm      **C** 8 mm      **D** 16 mm