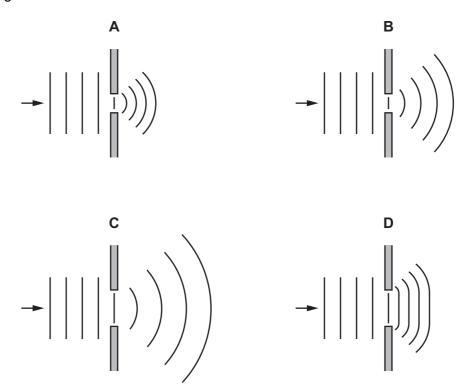
29 The diagrams show the diffraction of water waves in a ripple tank as they pass through a gap between two barriers.

Which diagram is correct?



30 A beam of light from a laser is incident normally on a double slit. Interference fringes are seen on a screen placed parallel to the double slit.

The separation of the two slits is a. The distance between the slits and the screen is D. The distance between the centres of two adjacent bright fringes is x.

D and a are both halved.

What is the distance between the centres of two adjacent bright fringes after these changes?

- A $\frac{x}{2}$
- **B** *x*
- **C** 2*x*
- **D** 4*x*