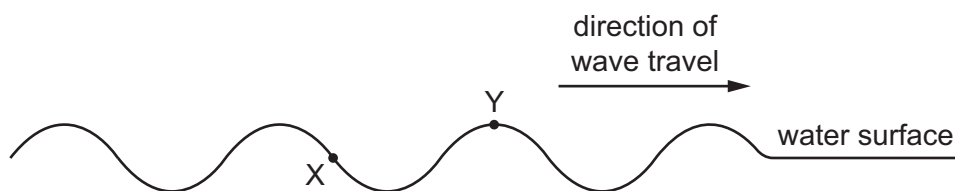


- 20 X and Y are two points on the surface of water in a ripple tank. A source of constant frequency generates a wave which travels past X and Y, causing them to oscillate vertically.

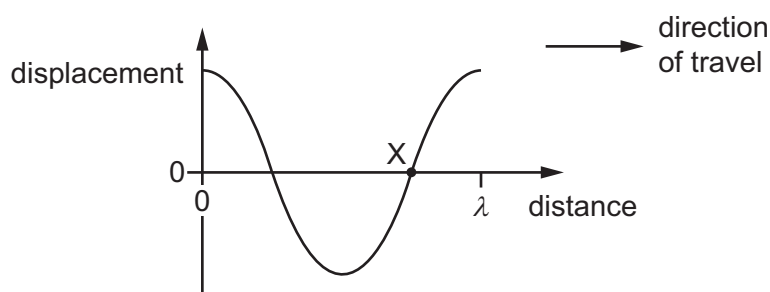


What is the phase difference between X and Y?

- A 45° B 135° C 180° D 270°

- 21 A transverse wave on a rope has wavelength λ and period T .

The graph shows the variation of the displacement of the particles of the rope with distance in the direction of travel of the wave at time $t = 0$.



A particle X is labelled.

Which graph shows the variation of the displacement of particle X with time t ?

