

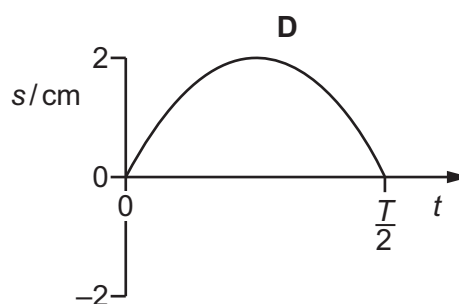
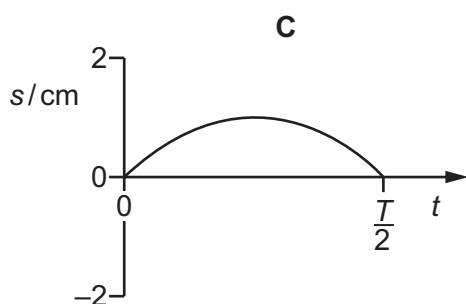
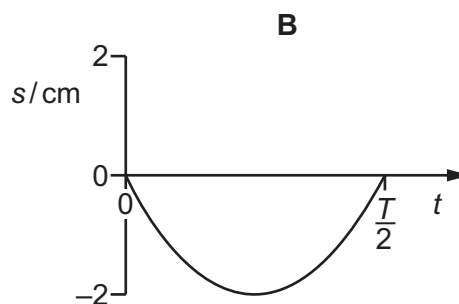
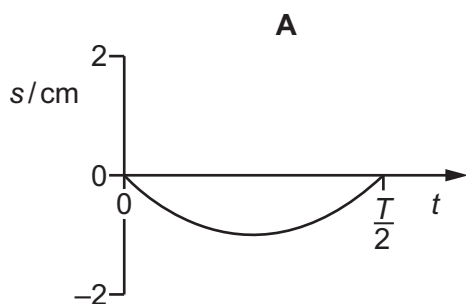
- 28 The diagram shows a stationary wave, at time $t = 0$, that has been set up on a string fixed between points P and S.



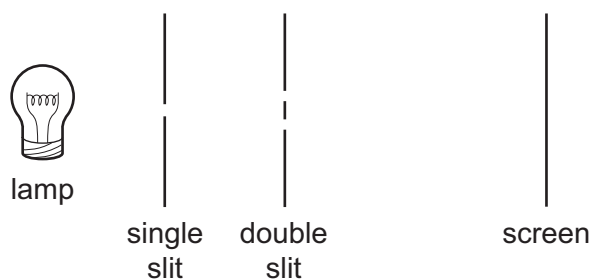
The nodes of the stationary wave occur on the string at P, Q, R and S. Point X is moving down at time $t = 0$. The points on the string vibrate with time period T and maximum amplitude 2 cm.

The displacement s is positive in the upward direction.

Which graph best shows the variation with t of the displacement s of point Y on the string?



- 29 A two-source interference experiment uses the apparatus shown.



What is the main purpose of the single slit?

- A** to make a narrow beam of light
- B** to make the same amplitude of light incident on each slit
- C** to provide coherent light
- D** to provide monochromatic light