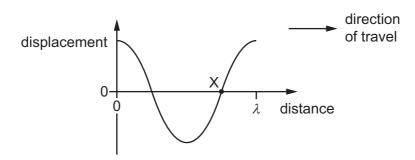
21 A transverse wave on a rope has wavelength λ and period T.

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*?

displacement

displacement 0 T t

displacement 0 T t

displacement

22 Which statement about all types of transverse waves is correct?

- **A** They all have the same speed.
- **B** They all have vibrations that are parallel to the direction of propagation of energy.
- **C** They can all form stationary waves.
- **D** They can all travel through a vacuum.