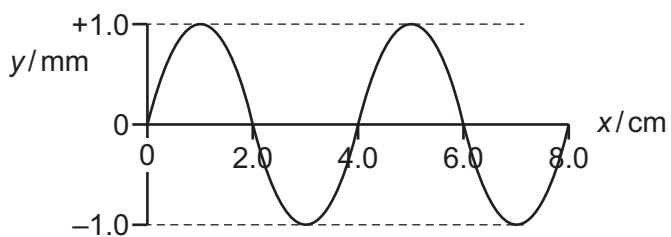


**22** A transverse wave in a medium has the waveform shown, where

$y$  = vertical displacement and  $x$  = horizontal distance.

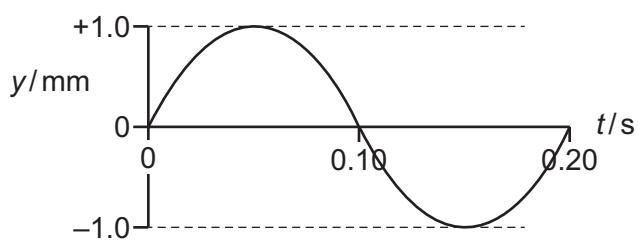
The speed of the wave is  $20.0 \text{ cm s}^{-1}$ .



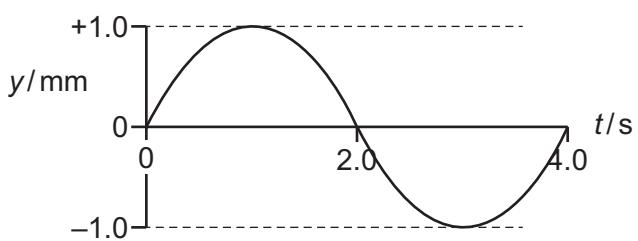
A particle of the medium oscillates vertically.

Which graph of vertical displacement  $y$  against time  $t$  best represents the motion of this particle?

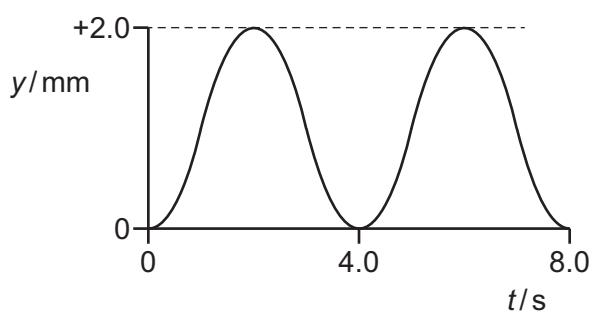
**A**



**B**



**C**



**D**

