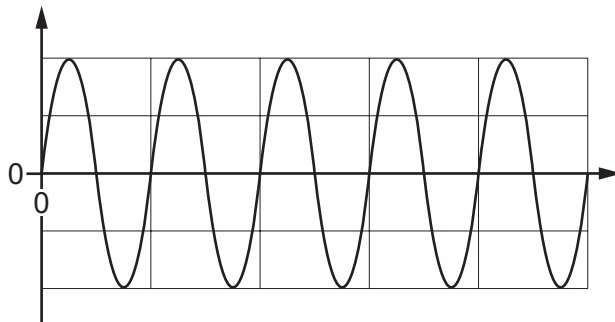


**21** A progressive longitudinal wave is travelling horizontally from left to right.

A graphical representation of the wave at one instant in time is shown.



Which row could give the correct labels for the  $x$ -axis and  $y$ -axis of this graph?

	$x$ -axis	$y$ -axis
<b>A</b>	distance	displacement of particles to the right
<b>B</b>	distance	displacement of particles upwards
<b>C</b>	time	displacement of particles to the right
<b>D</b>	time	displacement of particles upwards

**22** A progressive wave with a speed of  $500 \text{ m s}^{-1}$  has a wavelength of  $2.5 \text{ m}$ . The frequency of the wave is