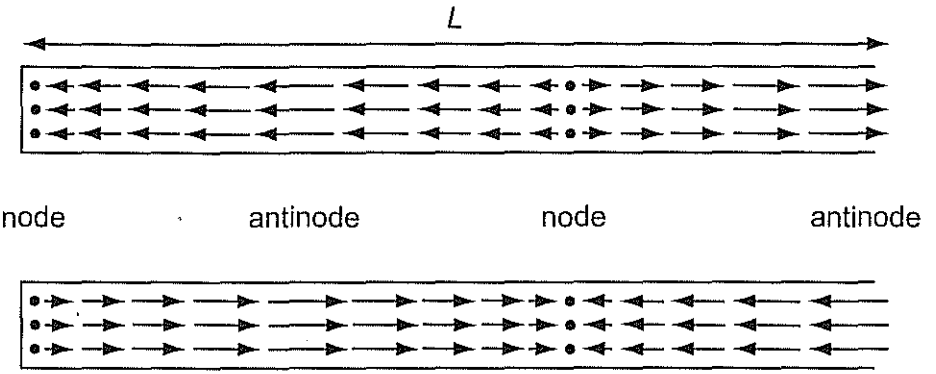
22 The diagrams show particle movement in an air column when a stationary wave exists in the column.



The first diagram shows the displacement of some particles at one instant and the second diagram shows the displacement of some particles half a cycle later.

What is the length L of the column in terms of the wavelength λ, and at which position within the column does the pressure change by the largest amount?

	length L	maximum pressure change at
A	$\frac{3}{4}\lambda$	node
B	$\frac{3}{4}\lambda$	antinode
C	$\frac{3}{2}\lambda$	node
D	$\frac{3}{2}\lambda$	antinode