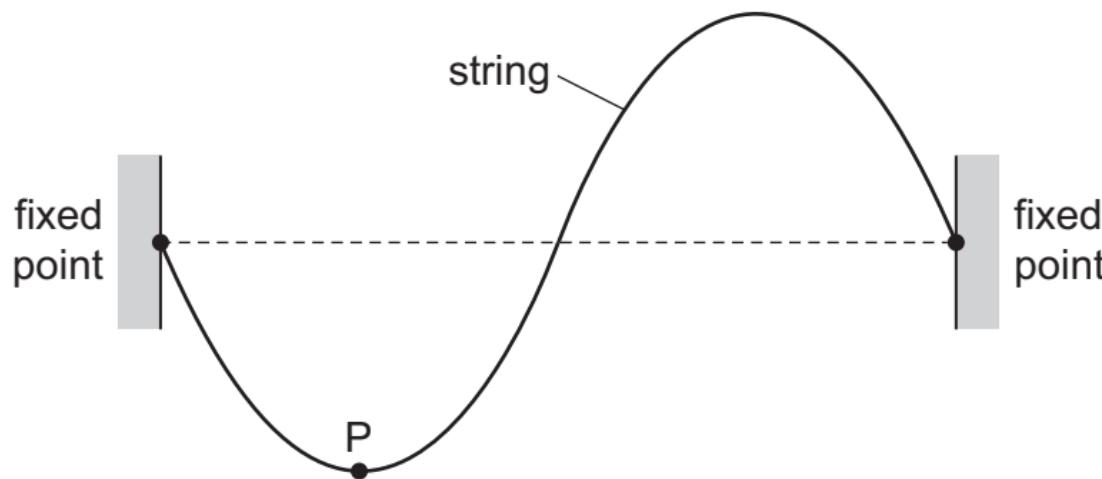


- 27 A stationary wave is formed on a stretched string. The diagram illustrates the string at an instant of time when the displacement of the string is at its maximum.



The frequency of the wave is 250 Hz. Point P on the string has a vertical displacement of  $-1.0\text{ mm}$ .

What will be the vertical displacement of the point P after a time of 5.0 ms?

- A  $-1.0\text{ mm}$
- B zero
- C  $+0.5\text{ mm}$
- D  $+1.0\text{ mm}$