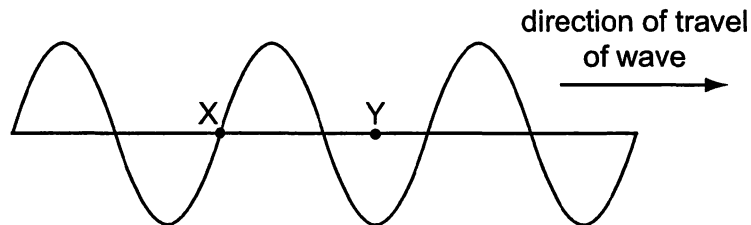


14 A transverse wave moves to the right.

X and Y are points in the path of the wave.



Which statement about the oscillations at X and at Y is correct?

- A** The oscillations at X and Y are in phase.
 - B** The frequency of oscillations at X is greater than the frequency of oscillations at Y.
 - C** The oscillations at X and Y have a phase difference of π rad.
 - D** The oscillations at X and Y have the same period.
- 15** Two waves, one having twice the amplitude of the other, are superposed. At point P, the waves are in phase. At point Q they have a phase difference of π rad.

What is the ratio $\frac{\text{intensity at point P}}{\text{intensity at point Q}}$?

- A** 9 **B** 4 **C** 3 **D** 2