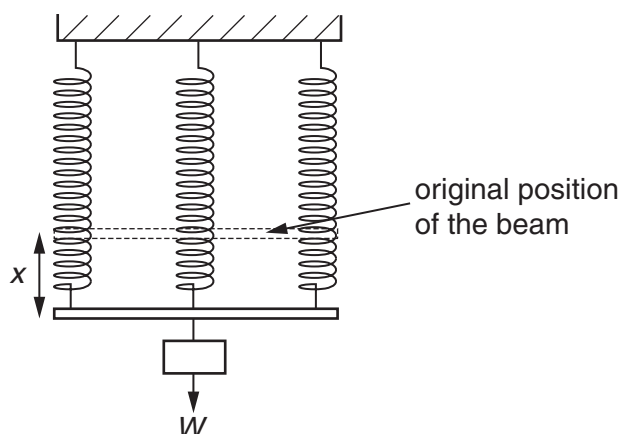


- 22 A beam, the weight of which may be neglected, is supported by three identical springs. When a weight  $W$  is hung from the middle of the beam, the extension of each spring is  $x$ .



The middle spring and the weight are removed.

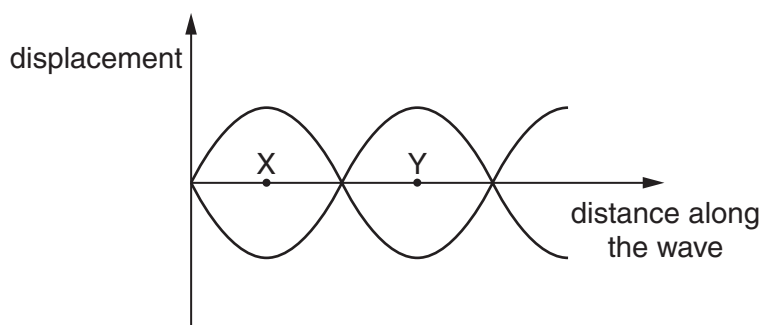
What is the extension when a weight of  $2W$  is hung from the middle of the beam?

- A  $\frac{3x}{2}$       B  $\frac{4x}{3}$       C  $2x$       D  $3x$

- 23 Which of the following is true for all transverse waves?

- A They are all electromagnetic.  
B They can all be polarised.  
C They can all travel through a vacuum.  
D They all involve the oscillation of atoms.

- 24 The graph represents a stationary wave at two different times.



What does the distance XY represent?

- A half the amplitude  
B half the frequency  
C half the period  
D half the wavelength