Answer on Question #43401 – Physics - Other

A wave in spring moves at a speed of 6.26 m/s. If the frequency of the wave is 2.24 Hz, what is its wavelength?

Solution:

$v = 6.26 \dfrac{m}{s} - speed\ of\ the\ wave;$

$f = 2.24\ Hz - frequency\ of\ the\ wave;$

Formula for the wavelength:

$$\lambda = \frac{v}{f} = \frac{6.26\dfrac{m}{s}}{2.24\ Hz} = 2.8\ m$$

Answer: wavelength is equal to $2.8\ m$.