

Answer on Question #40532 – Physics – Other

Speed of a wave having frequency 300 Hz is 340 m/s. Find out its wavelength.

Solution:

$f = 300\text{Hz}$ – frequency of the wave;

$v = 340 \frac{\text{m}}{\text{s}}$ – speed of the wave;

Formula for the wavelength:

$$\lambda = \frac{v}{f} = \frac{340 \frac{\text{m}}{\text{s}}}{300 \frac{1}{\text{s}}} = 1.13\text{m}$$

Answer: wavelength is equal to 1.13m.