

HARMONICS

Name _____

Part A: The Wave Formula

$$v = \lambda f$$

Symbol	Quantity	SI Unit	
v	Speed or velocity	Meters/second (m/s)	
λ	Wavelength	Meters (m)	The symbol for wavelength is the Greek letter lambda.
f	Frequency	Hertz (Hz)	

A.1 Which quantity is represented by a Greek letter?

A.2 Catherine shakes a slinky with a frequency of 4 Hz. The waves have a speed of 5 m/s. What is the wavelength?

Looking For	Formula	
Already Know		
Answer in a complete sentence <i>with unit</i> :		

A.3 Bobby is very fast and shakes a rope 18 times a second. The wavelength of each wave is .4 m. What is the speed of waves in the rope?

Looking For	Formula	
Already Know		
Answer in a complete sentence <i>with unit</i> :		

A.4 Henry creates waves with a wavelength of .55 m, and a speed of 3 m/s. What is the frequency of these waves?

Looking For	Formula	
Already Know		