Speed of a Wave Formulas

There are two formulas for the speed of a wave. One of them is the formula for the speed of *anything*, the other is specific to waves.

$d = v \cdot \Delta t$	$v = \lambda f$

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

1 Which quantity is represented by a Greek letter?

2 Which of the two formulas applies to the speed or velocity of *everything*?

3 Which of the two formulas applies specifically to waves?

4 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	
Already Know	
Formula	
Answer in a complete sentence *with units*:	

5 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	
Already Know	
Formula	
Answer in a complete sentence *with units*:	

6 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	
Already Know	
Formula	
Answer in a complete sentence *with units*:	

7 I have a wave with a frequency of 15 Hz, and a speed of 4 m/s. What is the wavelength?

Looking For	
Already Know	
Formula	
Answer in a complete sentence *with units*:	

8 Two step:
Howard creates waves with a frequency of 4 Hz and a wavelength of .33 m. a) How fast do the waves move? B) How far do the waves move in 5 seconds? [use d = vt]

Looking For	
Already Know	
Formula	
Answers in a complete sentence *with units*:	