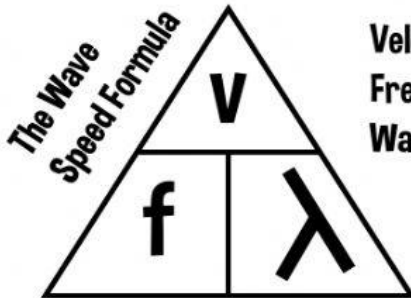


Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Calculating Wavespeed, Frequency, and Wavelength**

Directions: Calculate the wavespeed, frequency, or wavelength by using the formula below. Use your answers to color in the picture on the next page. Show your work!



**Velocity:** measured in meters per second ms<sup>2</sup>.

**Frequency:** measured in hertz. Hz is the symbol. It's the waves rate.

**Wavelength:** measured in meters. It is the length of each wave.

1. A wave has the frequency of 50 hertz and a wavelength of 10 meters. What is the wavespeed?	2. A wave has a frequency of 5hz and a wavespeed of 25m/s, what is the wavelength?
3. A wave has a wavelength of 10 meters and a wavespeed of 340m/s, what is the frequency of the wave?	4. A wave with the frequency of 13hz and a wavelength of 4 meters. At what speed will the wave travel?
5. A wave is moving 65 m/s, if the wavelength is 1.5 meters what is the frequency of the wave?	6. A wave has a frequency of 46 Hz and a wavelength of 2.3 meters. What is the speed of the wave?
7. A wave with the frequency of 500 Hz is traveling at a speed of 100 meters. What is the wavelength?	8. A wave has a wavelength of 125 meters and is moving at speed of 20m/s, what is it's frequency?
9. A wave has a wavelength of 80 meters and has a frequency of 60Hz, what is it's velocity?	10. A wave has a velocity of 45m/s and a wavelength of 9 meters. What is the wave's frequency?
11. A wave is moving at 300m/s and has a frequency of 25Hz, what is the wavelength?	12. A wave has a frequency of 53Hz and a wavelength of 4 meters. What is it's wasvespeed?
13. A wave has a velocity of 72 m/s and a frequency of 12Hz, what is the wavelength?	14. A wave has a wavelength of 87meters and a frequency of 4Hz, what is the wavespeed?