OUTSMART THE BAT

The Problem

As a tiger moth, you can jam the sonar of your predator, the bat, to defend yourself. You have determined that a bat is hunting you using sound waves with a frequency of _____ Hz.

You know that sound travels at 340 m/s in your environment. If you make a sound with the same frequency, _____ Hz, what wavelength do you have to produce to throw off the bat and avoid being eaten?

Determine the Wavelength

In the box below, show your work to figure out the wavelength needed to jam the bat's sonar.

Necessary Wavelength for Survival: _____