

NAME _____
PT PHYSICS

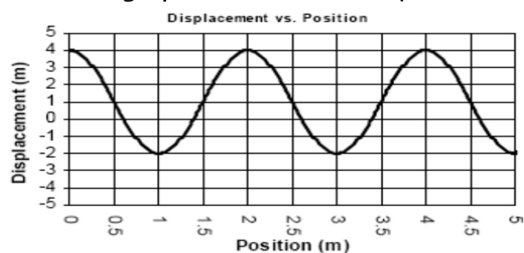
Waves Worksheet

1. You hear a plane 4 seconds after you see it. The speed of sound is 343 m/s. Find the distance to the plane.

Givens: $t =$ _____ sec $d =$ _____ m $v_s =$ _____ m/s

Equation:

Use the graph to answer these questions:



2. $\lambda =$ _____

3. 1 cycle is from 1 m to _____;

4. 1/2 cycle is from 0 m to _____.

5. Amplitude (A) = _____

6. Total number of cycles: _____;

7. Draw a wave on the graph above with $\frac{1}{2}$ the wavelength and $\frac{1}{2}$ the amplitude

8. The wave above is a sound wave with a speed of 343 m/s; find frequency:

Givens: $\lambda =$ _____ m $f =$ _____ Hz $v =$ _____ m/s

Equation:

9. A wave's velocity is 90 m/sec with a frequency of 6 Hz. What is its wavelength?

Givens: $\lambda =$ _____ m $f =$ _____ Hz $v =$ _____ m/s

Equation:

10. A wave has a wavelength of 20 m and a velocity of 50 m/s. Find its frequency.

Givens: $\lambda =$ _____ m $f =$ _____ Hz $v_s =$ _____ m/s

Equation: