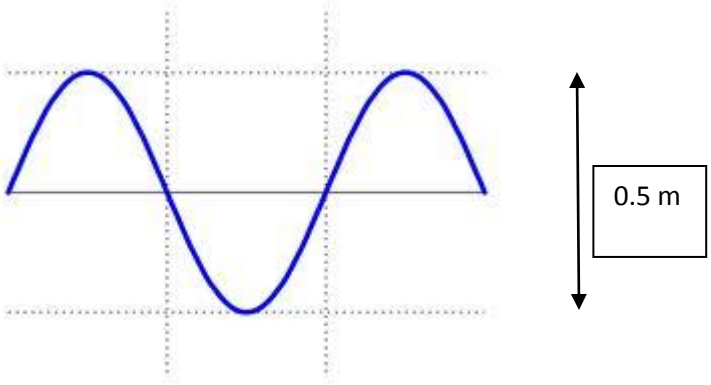


←---------- 6 meters ----------→

1. What is the wavelength of the wave above?

2. What is the amplitude of the wave ?

3. Assume the frequency of the wave is 2 Hz, calculate the velocity of the wave

4. What is the period of the wave?

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5. Given 2 resistors R1=100 ohms and R2 = 300 ohms connected in series with a battery supplying 40 volts, draw a proper schematic diagram and then calculate the following:

6.Total Resistance of the circuit

7. Total Current through the circuit

8. Voltage across the 100 ohm resistor

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9. Describe completely and in detail the method you would use to charge an object by induction.

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10. Assuming you have an object outside the focal length of a convex lens, draw a ray diagram and locate and label the image. Indicate if it is real or virtual.

11. A 100 ohm resistor and a 300 ohm resistor are connected in parallel to a 20 volt battery. Calculate the total resistance of the circuit and the current through each resistor.