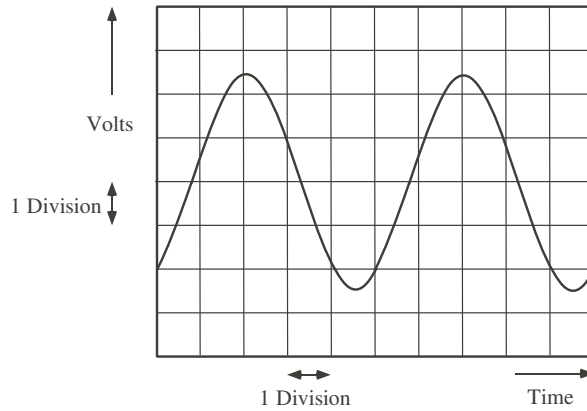


Advanced Reading Questions: Oscilloscope Lab

The diagram below shows a view of an oscilloscope screen. The oscilloscope input is a sinusoidal voltage signal, which is the trace shown on the screen. The oscilloscope's **volts/div** knob is set to **0.1 volts/div**, and the **sec/div** knob is set to $50 \mu\text{s}/\text{div}$ ($1 \mu\text{s} = 1 \times 10^{-6} \text{ s}$).



1. What is the peak-to-peak amplitude of this signal, in volts?
2. What is the period, T of this signal, in seconds?
3. What is the frequency, f , of this signal in hertz, Hz ($1 \text{ Hz} = 1 /\text{s}$)?
4. What is the total time taken for the electron beam to cross the oscilloscope screen once?