

EECS 40/43
Pre-Lab Oscilloscope
(Note: You must show your work to receive full credit.)

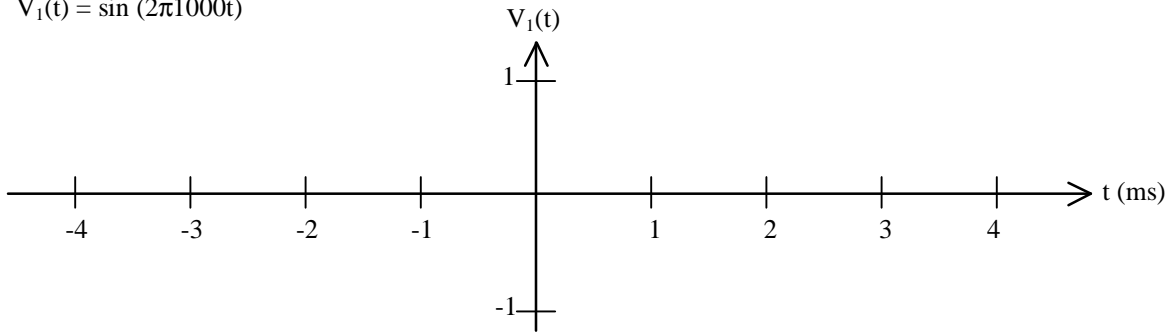
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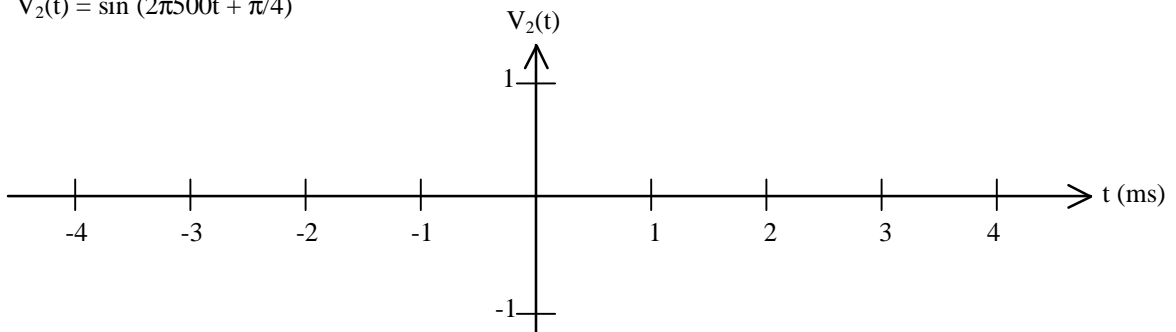
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1. Plot the following voltage signals [15 pts]:

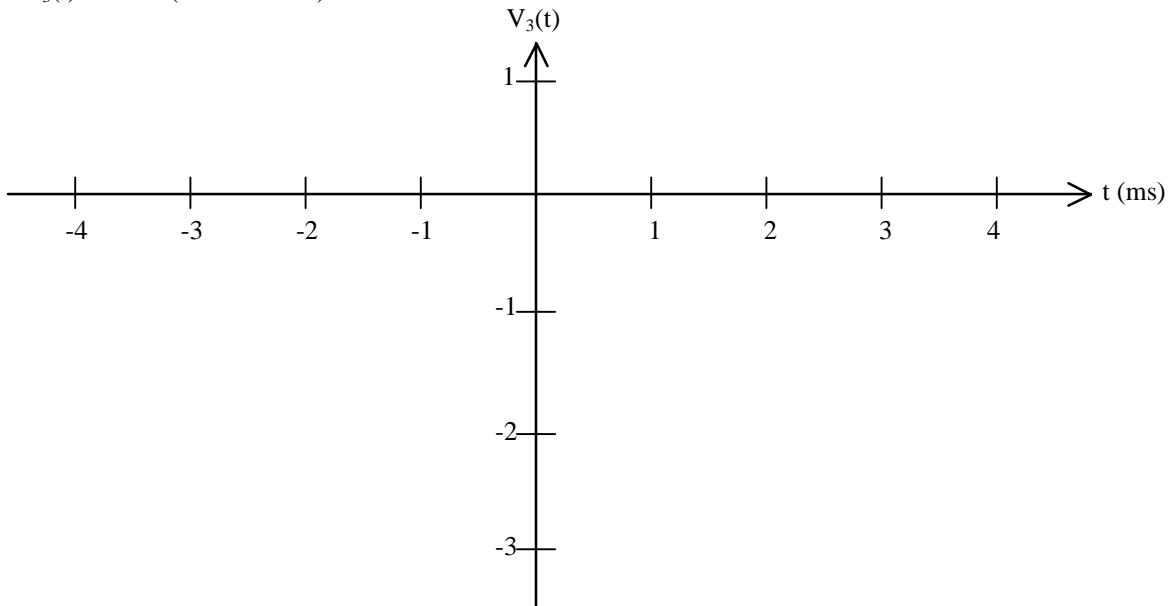
(a) $V_1(t) = \sin(2\pi 1000t)$



(b) $V_2(t) = \sin(2\pi 500t + \pi/4)$



(c) $V_3(t) = 2 \cdot \sin(2\pi 500t + \pi/4) - 0.5$



2. The oscilloscope graphs the value of the input signal (in Volts) vs. time for a specified time interval.

a) What determines the duration (in seconds) of this time interval? [10 pts]

b) What determines the starting point of this time interval? [10 pts]

3. Describe what the oscilloscope does after graphing the voltage over a single time interval, for the following three triggering modes:

Normal [5 pts]:

Auto [5 pts]:

Single [5 pts]: