Student's Name:

Introduction to circuit analysis

Homework 10 – Sinusoidal Definitions

Instructions:

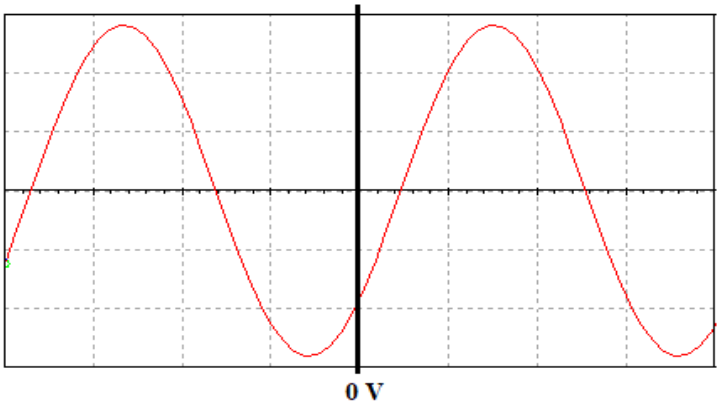
- Show all work to earn full credit
- Answers must be in engineering notation rounded off to the hundredth places.

Question 1 through 3

For the each following sinusoidal, find:

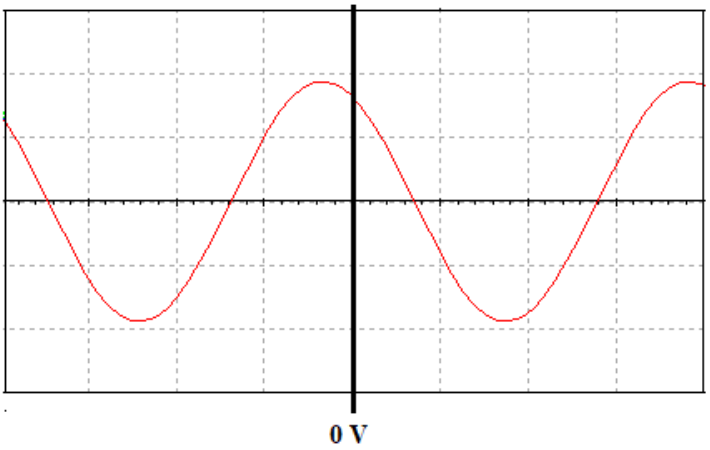
a. Peak value
b. Peak-peak value
c. rms value
d. phase angle
e. Period
f. Angular velocity
g. Write the analytical expression, equation, for the waveform

1)



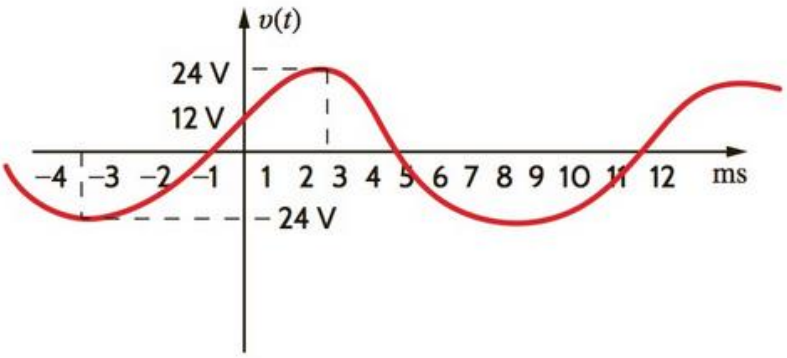
Volts/div = 20 V time/div = 20 ms

2)



Volts/div = 100 mV time/div = 100 µs

3)



Question 4 and 5

Sketch the following sinusoidal with the amplitude (peak) value, the period, and the phase angle.

4) $v(t) = 110\sin(120\pi t + 80^0)$ V

5) $i(t) = 12\sin(2500t - 130^0)$ mA

---------- Homework Ends Here ----------