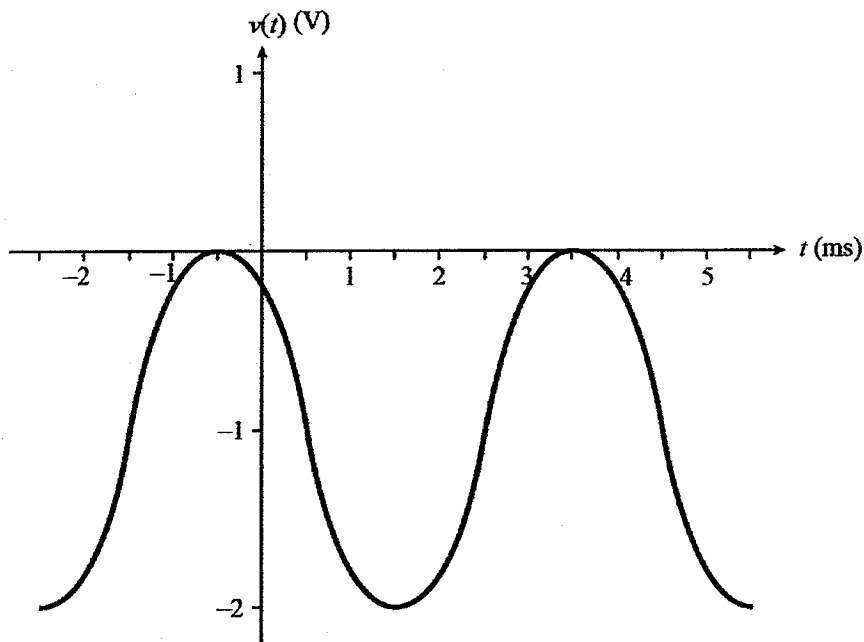


5. (10 points)



6 pts a) Find the phase angle of the above waveform in degrees.

4 pts b) Find the DC offset of the above waveform.

sol'n: a) Using peak to left of $t=0$, we have

$$\phi = \frac{-\left(-\frac{1}{2}\right)}{\underbrace{(3.5 - 0.5)}_{\frac{\Delta t}{T}}} \cdot 360^\circ = \frac{1/2}{4} \cdot 360^\circ = 45^\circ$$

$$b) V_{DC} = \frac{\overset{\text{max}}{0} + \overset{\text{min}}{-2}}{2} V = -1V$$