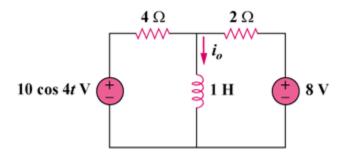
EE1002 Tutorial 10

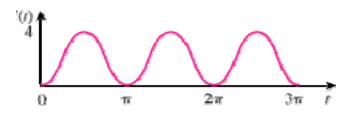
(Questions from Alexander & Sadiku, 7th edition, Problems 10.40, 11.22, & 11.27)

1. Find i_0 in the circuit shown in the following figure using superposition.



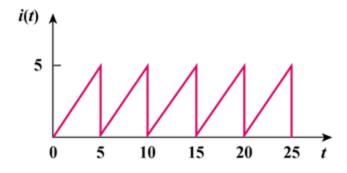
Ans: $[4 + 0.79\cos(4t-71.56^{\circ})]$ A

2. Find the rms value of the offset sine wave shown in the following figure.



Ans.: 2.449 A

3. Calculate the rms value of the current waveform of the following figure.



Ans.: 2.887A