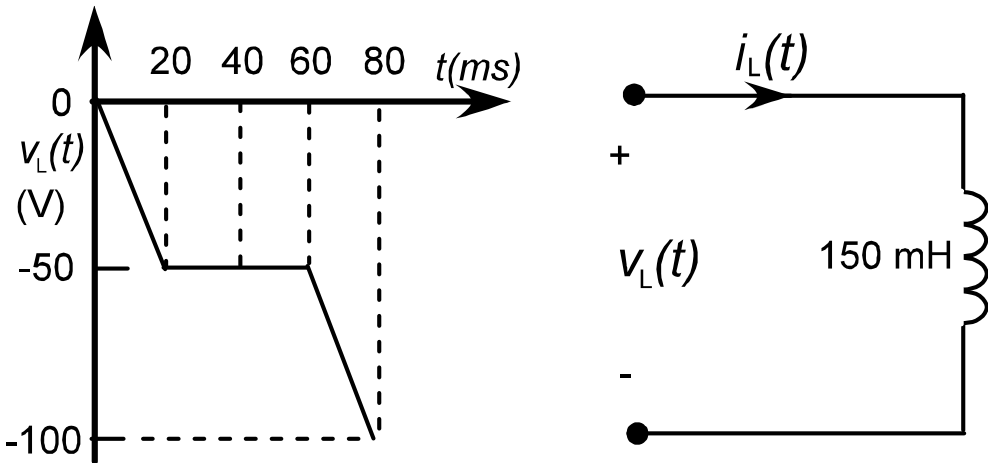
ROSE-HULMAN INSTITUTE OF TECHNOLOGY

ECE203 DC Circuits Spring 2016-2017

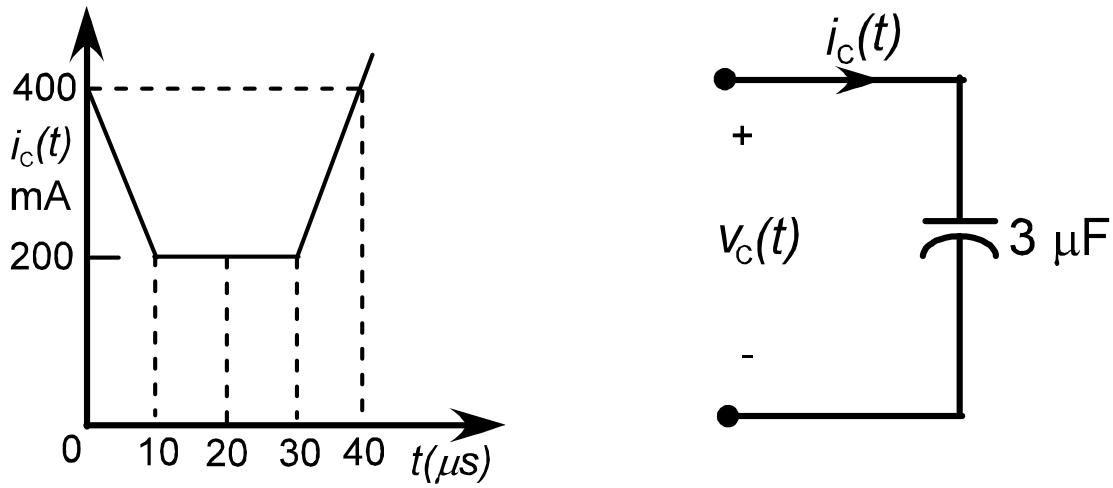
Homework Set #25
DUE Monday, May 15, 2017

1. Consider the voltage waveform shown in the graph below left:



Suppose the voltage is applied across the 150 mH inductor, find the instantaneous current through the inductor and total energy stored at t = 40 ms ($i_L(40$ ms$)$ & $w_L(40$ ms$)$) if the initial current is zero.

2. Consider the current waveform shown in the graph below left:



Suppose the current is applied to the 3 μF capacitor, find the instantaneous voltage across the capacitor and total energy stored at t = 25 μs ($v_C(25\mu s)$ & $w_C(25\mu s)$) if the initial voltage is zero.