Aidan Chin	compute i(t), v(t), p(t), and the final energy stored in the inductor (after a very, very long time)				
45259					
ECE 202					
t initial (milliseconds)	t final (milliseconds)	V_0 (volts	R (Ohms)	L (Millihenries)	
0	=10*B9	5	2	10	
t step	tau				
=B7/400	=E7/D7				
		voltage across inductor	power absorbed by inductor	total energy stored in inductor after inf time	final energy stored in inductor
t (ms)	e(-t/tau)	i(t) (amps)	v(t) (volts)	p(t) (watts)	P Final (watts)
=A7	=EXP(-A12/$B$9)	=($C$7*(1-B12))/$D$7	=$C$7*B12	=C12*D12	=0.5*E7*F14^2
=A12+$A$9	=EXP(-A13/$B$9)	=($C$7*(1-B13))/$D$7	=$C$7*B13	=C13*D13	i(t) when t = inf (amps)
=A13+$A$9	=EXP(-A14/$B$9)	=($C$7*(1-B14))/$D$7	=$C$7*B14	=C14*D14	=$C$7/$D$7
=A14+$A$9	=EXP(-A15/$B$9)	=($C$7*(1-B15))/$D$7	=$C$7*B15	=C15*D15	measured P Final (watts)
=A15+$A$9	=EXP(-A16/$B$9)	=($C$7*(1-B16))/$D$7	=$C$7*B16	=C16*D16	=0.5*E7*(SUM(E12:E412)/(B7/A9))*10
=A16+$A$9	=EXP(-A17/$B$9)	=($C$7*(1-B17))/$D$7	=$C$7*B17	=C17*D17	Percent Error check of P Final
=A17+$A$9	=EXP(-A18/$B$9)	=($C$7*(1-B18))/$D$7	=$C$7*B18	=C18*D18	=ABS((F12-F16)/F12)*100
=A18+$A$9	=EXP(-A19/$B$9)	=($C$7*(1-B19))/$D$7	=$C$7*B19	=C19*D19	
=A19+$A$9	=EXP(-A20/$B$9)	=($C$7*(1-B20))/$D$7	=$C$7*B20	=C20*D20	
=A20+$A$9	=EXP(-A21/$B$9)	=($C$7*(1-B21))/$D$7	=$C$7*B21	=C21*D21	
=A21+$A$9	=EXP(-A22/$B$9)	=($C$7*(1-B22))/$D$7	=$C$7*B22	=C22*D22	