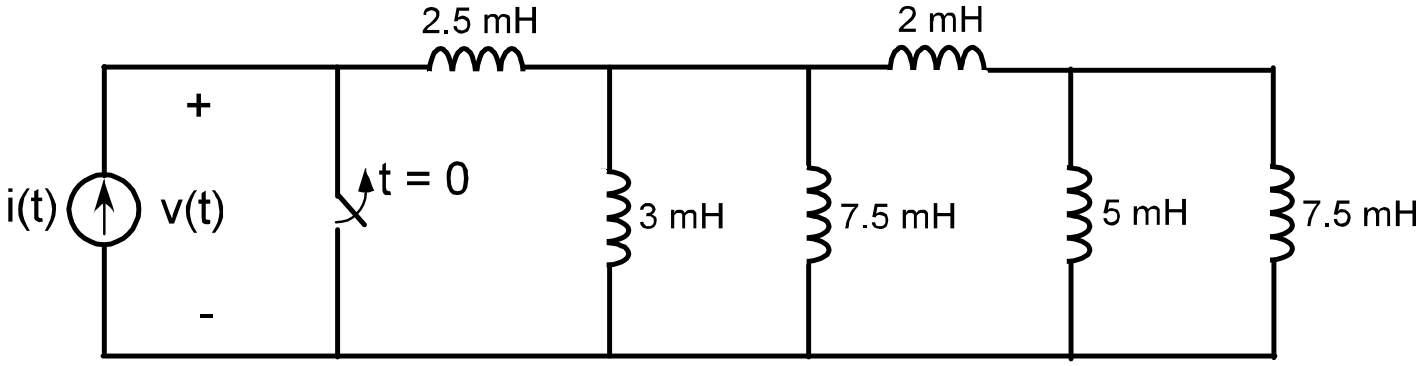
Homework Set #2
Textbook: Chapter 6.3
Coverage: Capacitors and Inductors in Series and Parallel

DUE Thursday September 7, 2017

1.

a) For the circuit shown below determine the value of a single equivalent inductor that can be placed across the source.

b) Assume the answer to part (a) is 3 mH (this is not the answer to part a) what would be the energy stored when i(t) = 400 mA?

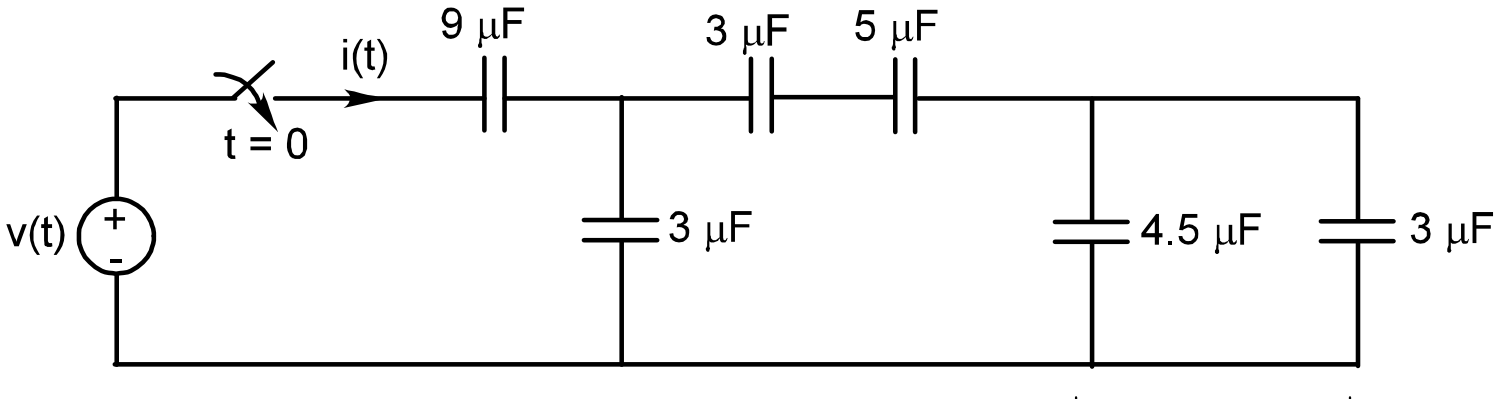


2. Problem 6.25 *(part e = 60 J, part f = 50 J)*

3.

a) For the circuit shown below determine the value of a single equivalent capacitor that can be placed across the source.

b) Assume the answer to part (a) is 5 μF (this is not the answer to part a) what would be the energy stored when v(t) = 100 V?



4. Problem 6.31