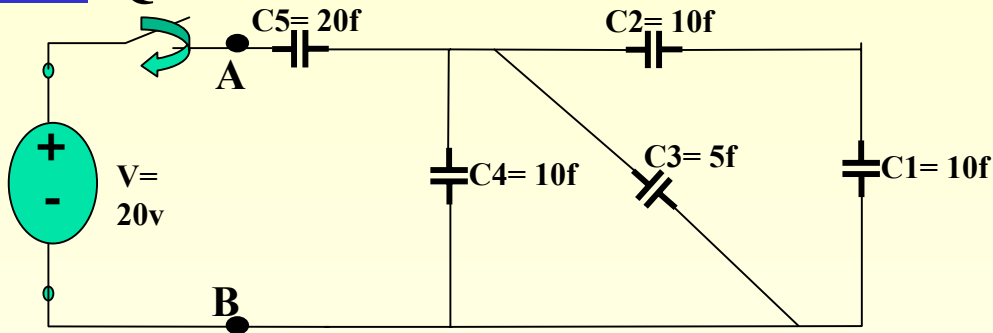


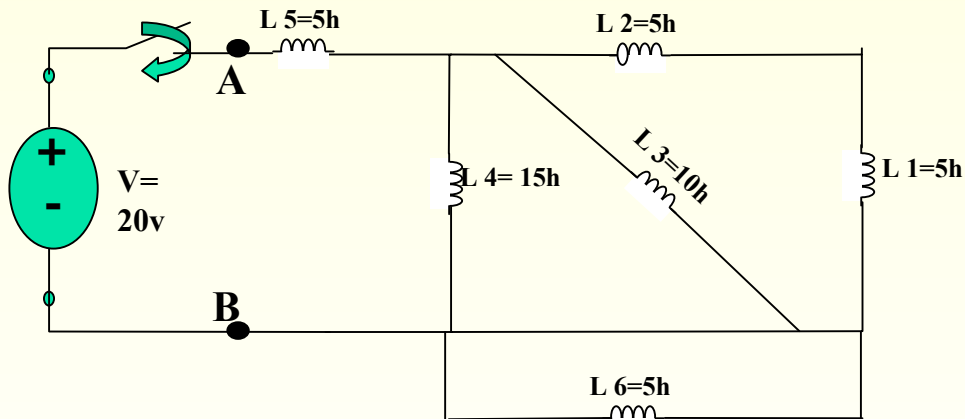
# Quiz 3

## Question 1



- The equivalent capacitor between nodes A & B.
- If the switch is closed at  $t = 0+$  find the voltage and current at node A at  $t = 0+$ .
- Final voltage and current

## Question 2



- The equivalent inductance between nodes A & B.
- If the switch is closed at  $t = 0+$  find the voltage and current at node A at  $t = 0+$ .
- Final voltage and current



# Quiz 3

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- **Question 3:**

- **Inductance of the bond wire of a memory chip is 10nh. This induces a noise voltage of 5v. How much inductance you will add to reduce the noise voltage to 2.5v? Will this be in series or parallel?**

- **Question 4:**

- **If it takes 10 seconds for the power supply to ramp up to the final voltage of 10v , what is the peak current the power supply has to supply , assuming the capacitance of the laptop is 10 farads. What is the final current?**