Introduction to circuit analysis

Homework 11 – Basic Elements and Phasors

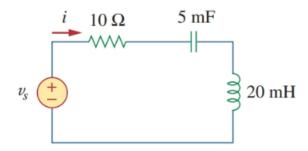
Instructions:

- Show all work to earn full credit
- Answers must be in engineering notation rounded off to the hundredth places.

Question 1 and 2) Given the following circuit, find:

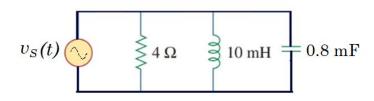
- a. The capacitance and inductance reactance
- b. The resistance, capacitance, and inductance impedance
- c. The voltage through the resistor, capacitor, and inductor.

Question 1)



$$v_s(t) = 50\sin(200t - 10^0) V$$

Question 2)



$$v_s(t) = 50\sin(500t) V$$

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