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Started on	Wednesday, 30 November 2016, 11:03 AM
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State	Finished
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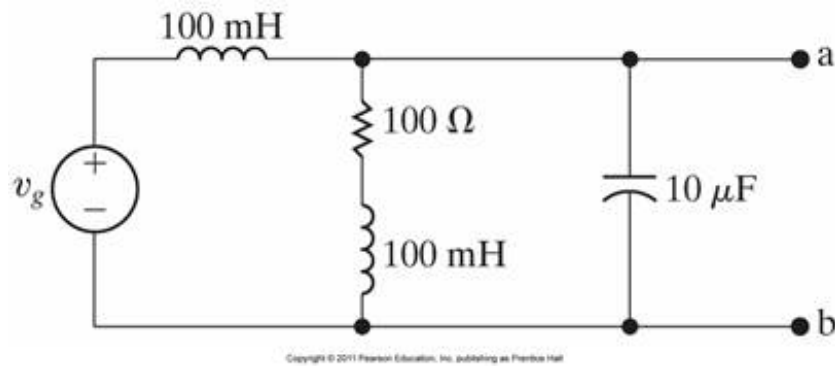
Completed on	Wednesday, 30 November 2016, 11:53 AM
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Time taken	50 mins
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Grade	0.00 out of 100.00
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Question 1

Not answered

Mark 0.00 out of
100.00**Quiz 11b**

The sinusoidal voltage source in the circuit is developing a voltage equal to $200 \cos(800t + 45^\circ) \text{ V}_{\text{rms}}$.

a) Find the Thévenin voltage with respect to the terminals a,b.

Express your answer in polar form.

Magnitude $|V_{\text{Th}}| =$ $\times \text{ V}$

Angle = \times° (Degrees)

b) Find the Thévenin impedance with respect to the terminals a,b.

Express your answer in polar form.

Magnitude $|Z_{\text{ab}}| =$ $\times \Omega$ (Ohm)

Angle = \times° (Degrees)

Numeric Answer

$V_{\text{Th}} = 316.0659$ at angle 11.97° Volts

$Z_{\text{ab}} = 48.7306 + j 74.9476 = 89.3969$ at angle $56.97^\circ \Omega$ (Ohm)