Homework 9
EE 220 Circuits I Fall 2019
Monday, November 18, 2019

1) PP9.1 Also, express sinusoid as a phasor.

2) PP9.9 Also, draw phasor equivalent circuit.

3) PP9.12 Also, find the equivalent impedance $\mathbf{Z}_{\text{eq}}$ 'seen' by the source.

4) 9.16

5) 9.23

6) 9.34 Also, draw the phasor equivalent circuit and find the equivalent impedance $\mathbf{Z}_{\text{eq}}$ 'seen' by the source at frequency ω.

7) 9.46 Also, draw phasor equivalent circuit and use phasor analysis to find the equivalent impedance $\mathbf{Z}_{\text{eq}}$ 'seen' by the source.

8) 9.66 Also, find $\mathbf{Y}_T$. Express answers for $\mathbf{Y}_T$ and $\mathbf{Z}_T$ in both rectangular and polar (angle in degrees) forms.

Notes: • For this class, always define phasors in terms of the **cos()** function.

• Unless told otherwise, always put current & voltage <u>phasors</u> in polar form with angle in degrees (e.g., $A\angle\theta$).

• Unless told otherwise, always put time-domain sinusoidal currents & voltages in terms of the **cos()** function.

• Unless told otherwise, always put impedances & admittances in rectangular form (e.g., $A + jB$).

Due Friday, November 22, 2019.