

VE215

Assignment #9

Fall 2016

Problem 1

Obtain the line currents in the three-phase circuit of Fig. 1 below.

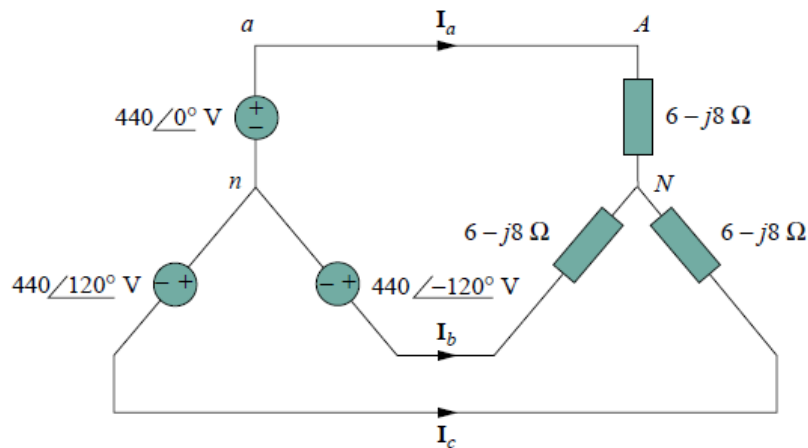


Figure 1

Problem 2

For the three-phase circuit of Fig. 2, $I_{bB} = 30 \angle 60^\circ$ A and $V_{BC} = 220 \angle 10^\circ$ V. Find V_{an} , V_{AB} , I_{AC} , and Z .

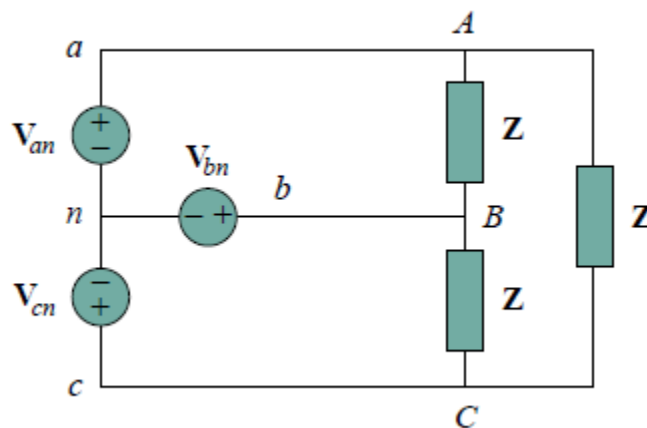


Figure 2

Problem 3

For the Δ - Δ circuit of Fig. 3, calculate the phase and line currents.

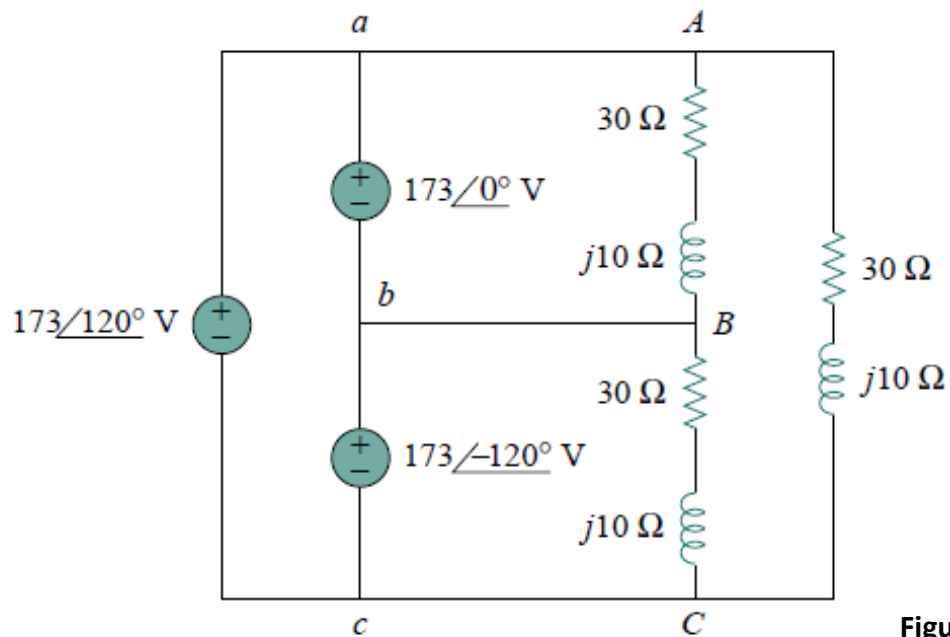


Figure 3

Problem 4

Find the real power absorbed by the load in Fig.4.

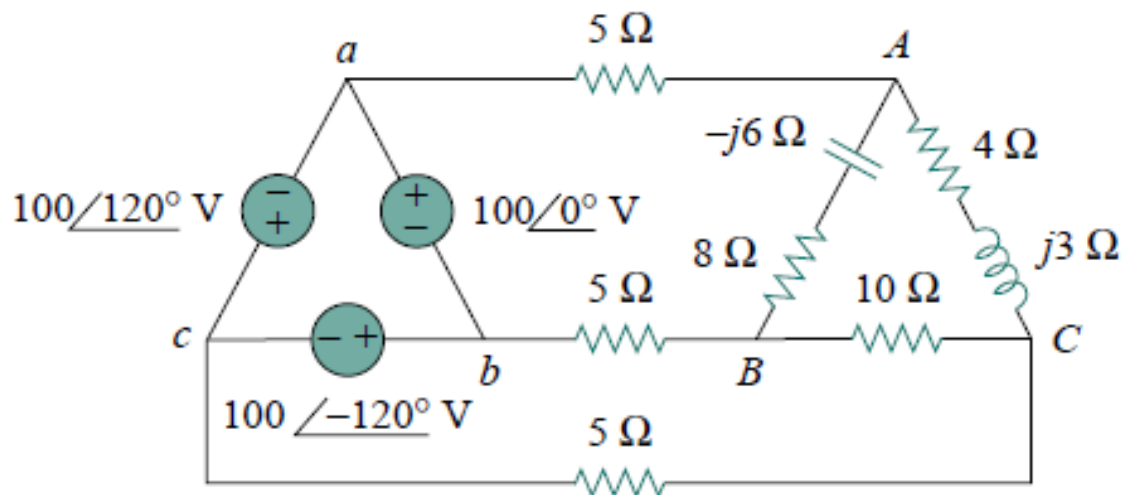


Figure 4