VE215 2024FA Assignment 5

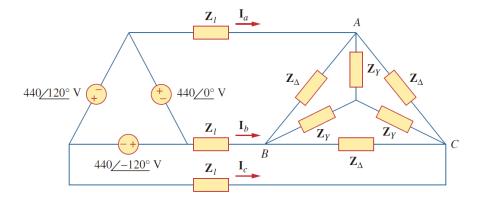


Due Date: 23:59, Dec.9th, 2024

In order to get full marks (60 points), you shall write all the intermediate steps of calculation or proof unless otherwise indicated. This assignment covers content of chapter 12.

Exercise 5.1 (20%)

Find the line currents in the three-phase network. Take $Z_{\Delta}=12-j15\,\Omega,\,Z_{Y}=4+j6\,\Omega,\,Z_{L}=2\,\Omega.$



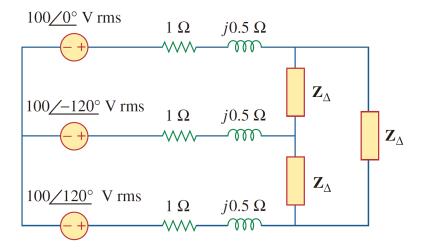
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Exercise 5.2 (20%)

For the three-phase circuit below, find the average power absorbed by the delta-connected load with

$$Z_{\Delta} = 21 + j24 \,\Omega.$$



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Exercise 5.3 (20%)

Obtain the line currents in the three-phase circuit

