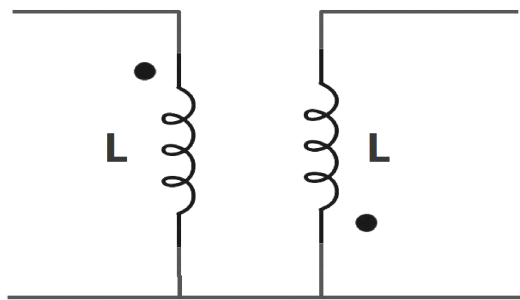# VE215   Quiz #6

Chapter 13 is covered in this quiz.

Problem #1

Please derive the T-transformation and Π transformation for the linear coupled transformer.

Problem #2

Please calculate the

(1) total instant energy stored in all capacitors and inductors at time **t**.

(2) total average energy stored in all capacitors and inductors.

for the magnetically coupled circuit below.

Note: The voltage input is a sine wave with **100V** RMS voltage.