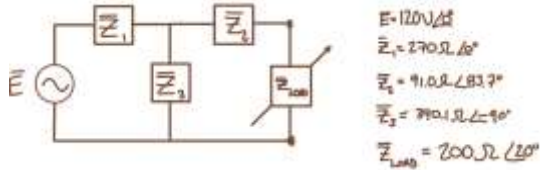


AC Thevenin's Theorem (29:28)

Discuss the advantages of applying Thevenin's Theorem to a series-parallel circuit for varying load conditions.

List the steps necessary to apply Thevenin's Theorem

Determine the Thevenin's equivalent circuit seen by the variable load impedance Z_{LOAD} .



Using the Thevenin's equivalent circuit determine the voltage across the load and the current through the load for the following conditions.

Z_{LOAD}
 $100\Omega \angle -15^\circ$
 $300\Omega \angle -15^\circ$
 $300\Omega \angle 15^\circ$
 $145.9\Omega \angle -10.6^\circ$
 $145.9\Omega \angle 0^\circ$
 $145.9\Omega \angle 10.6^\circ$

Discuss the real world complications of building an actual Thevenin's equivalent circuit.

Determine the component level values necessary to build the above Thevenin's equivalent circuit.

Describe a simple method of determining the Norton's equivalent of a larger more complicated series-parallel circuit.

Determine the Norton's equivalent of the previous series-parallel circuit.