

- Find the Thevenin equivalent circuit external to the indicated load (Figure 1) at a frequency of **5 kHz**, and determine the power dissipated by the load if $Z_L = 100\Omega \angle 30^\circ$

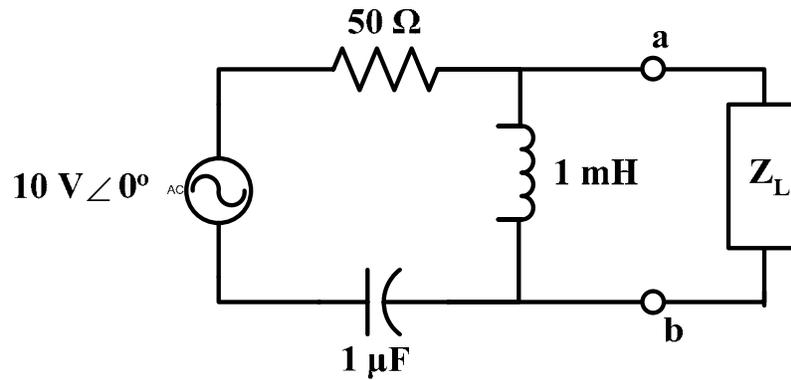


Figure 1.

- Determine the load impedance, Z_L , in Figure 2 needed to ensure that the load receives maximum power, and find the maximum power to the load.

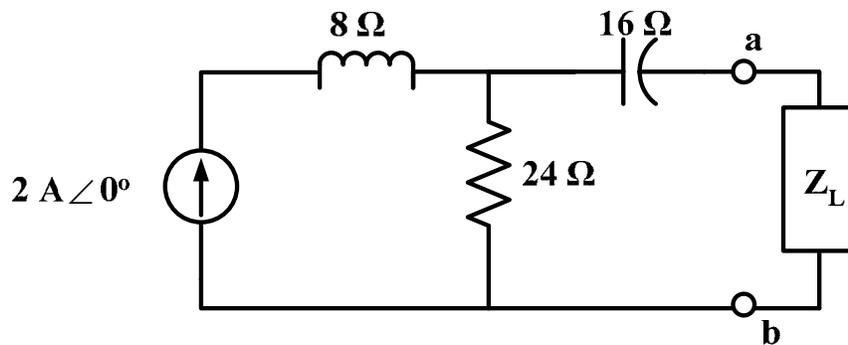


Figure 2.