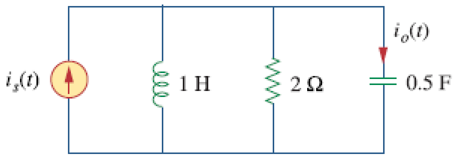
Cramming course of circuit

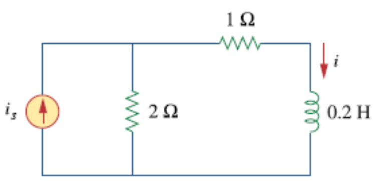
Chapter 16, Problem 5.

If $i_s(t) = e^{-2t}u(t)$ A in the circuit shown in Fig. 16.39, find the value of $i_0(t)$.



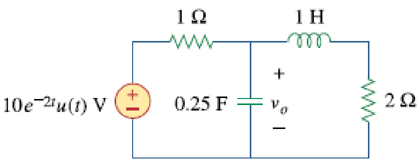
Chapter 16, Problem 3.

Find $i(t)$ for $t > 0$ for the circuit in Fig. 16.37. Assume $i_s = 4u(t) + 2\delta(t)$mA. (Hint: Can we use superposition to help solve this problem?)



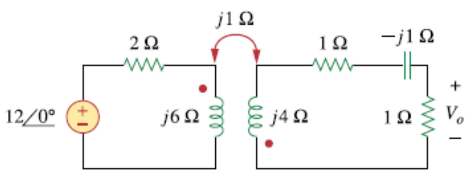
Chapter 16, Problem 10.

Use Thevenin's theorem to determine $v_0(t)$, $t > 0$ in the circuit of Fig. 16.44.



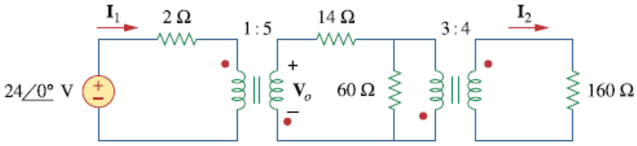
Chapter 13, Problem 7.

For the circuit in Fig. 13.76, find V_o.



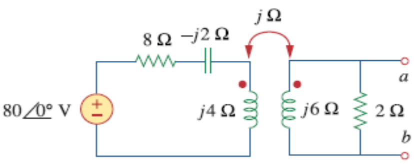
Chapter 13, Problem 61.

PS ML * For the circuit in Fig. 13.126, find $\mathbf{I}_1$, $\mathbf{I}_2$, and $\mathbf{V}_o$.



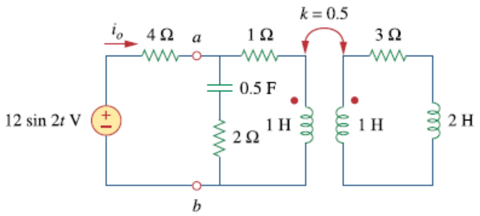
Chapter 13, Problem 16.

PS ML Obtain the Norton equivalent at terminals *a-b* of the circuit in Fig. 13.85.



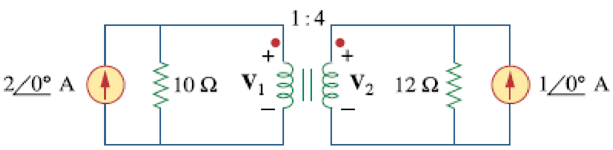
Chapter 13, Problem 25.

For the network in Fig. 13.94, find $\mathbf{Z}_{ab}$ and $\mathbf{I}_o$.



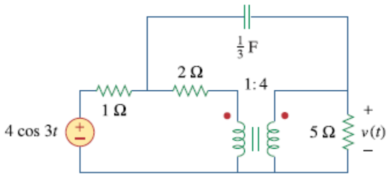
Chapter 13, Problem 43.

Obtain $\mathbf{V}_1$ and $\mathbf{V}_2$ in the ideal transformer circuit of Fig. 13.108.



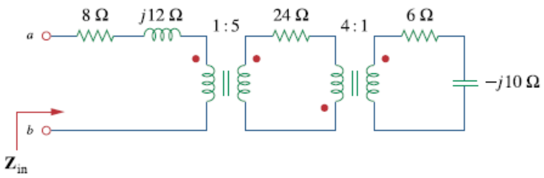
Chapter 13, Problem 47.

Find $v(t)$ for the circuit in Fig. 13.112.



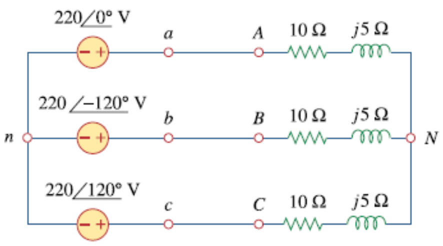
Chapter 13, Problem 50.

Calculate the input impedance for the network in Fig. 13.115.



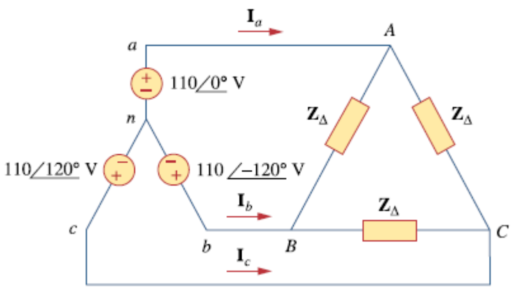
Chapter 12, Problem 6.

For the Y-Y circuit of Fig. 12.41, find the line currents, the line voltages, and the load voltages.



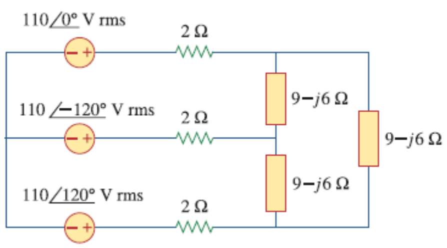
Chapter 12, Problem 12.

Solve for the line currents in the Y-Δ circuit of Fig. 12.45. Take $\mathbf{Z}_{\Delta} = 60\angle 45°\Omega$.



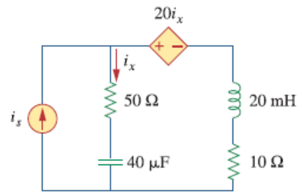
Chapter 12, Problem 13.

In the balanced three-phase Y-Δ system in Fig. 12.46, find the line current I_L and the average power delivered to the load.



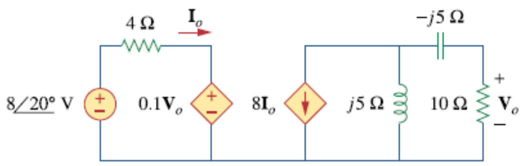
Chapter 11, Problem 6.

For the circuit in Fig. 11.38, $i_s = 6\cos 10^3 t$ A. Find the average power absorbed by the 50-Ω resistor.



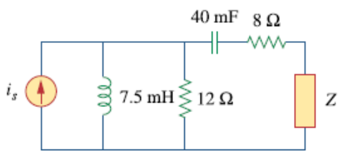
Chapter 11, Problem 7.

Given the circuit of Fig. 11.39, find the average power absorbed by the 10-Ω resistor.



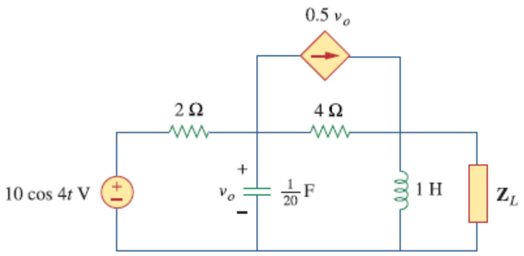
Chapter 11, Problem 14.

It is desired to transfer maximum power to the load **Z** in the circuit of Fig. 11.45. Find **Z** and the maximum power. Let $i_s = 5\cos 40t$ A .



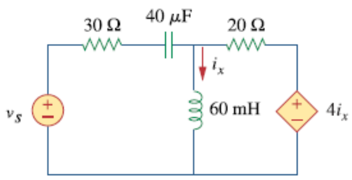
Chapter 11, Problem 16.

For the circuit of Fig. 11.47, find the maximum power delivered to the load $\mathbf{Z}_L$.



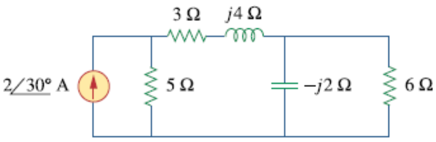
Chapter 11, Problem 44.

Find the complex power delivered by v_s to the network in Fig. 11.69.
Let $v_s = 100 \cos 2000t$ V.



Chapter 11, Problem 56.

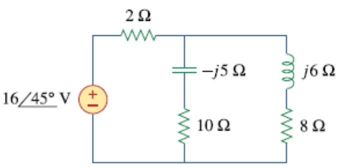
Obtain the complex power delivered by the source in the circuit of Fig. 11.75.



Chapter 11, Problem 51.

For the entire circuit in Fig. 11.70, calculate:

(a) the power factor
(b) the average power delivered by the source
(c) the reactive power
(d) the apparent power
(e) the complex power



Chapter 10, Problem 3.

Determine v_o in the circuit of Fig. 10.52.

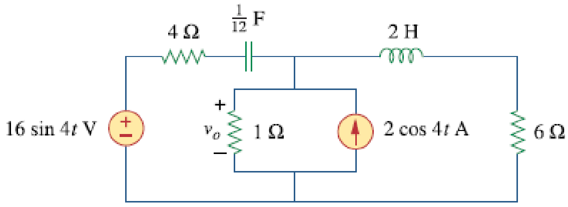


Figure 10.52

For Prob. 10.3.

Chapter 10, Problem 7.

Use nodal analysis to find **V** in the circuit of Fig. 10.56.

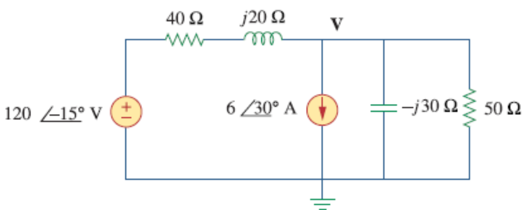


Figure 10.56

Chapter 10, Problem 19.

Obtain $\mathbf{V}_o$ in Fig. 10.68 using nodal analysis.

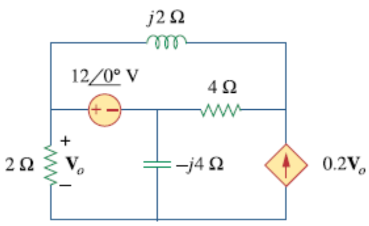


Figure 10.68

Chapter 8, Problem 50.

For the circuit in Fig. 8.97, find $i(t)$ for $t > 0$.

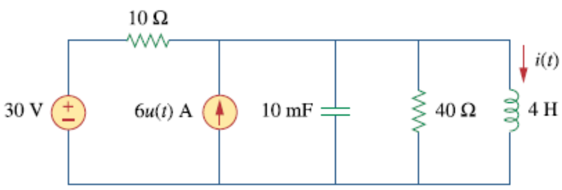
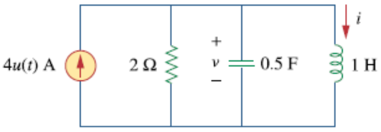


Figure 8.97
For Prob. 8.50.

Chapter 8, Problem 45.

In the circuit of Fig. 8.92, find $v(t)$ and $i(t)$ for $t > 0$. Assume $v(0) = 0$ V and $i(0) = 1$ A.



Chapter 8, Problem 33.

Find $v(t)$ for $t > 0$ in the circuit of Fig. 8.81.

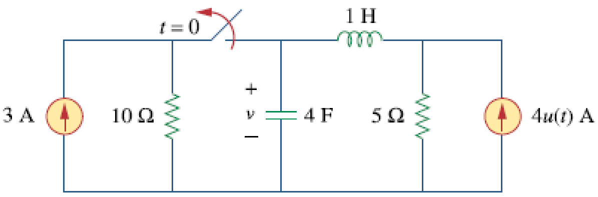
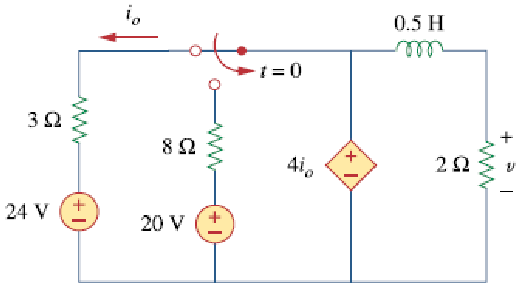


Figure 8.81
For Prob. 8.33.

Chapter 7, Problem 55.

Find $v(t)$ for $t < 0$ and $t > 0$ in the circuit of Fig. 7.121.



Chapter 7, Problem 43.

Consider the circuit in Fig. 7.110. Find $i(t)$ for $t < 0$ and $t > 0$.

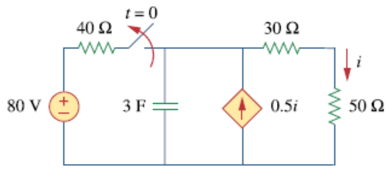


Figure 7.110
For Prob. 7.43.