4.6 For the linear circuit shown in Fig. 4.74, use linearity to complete the following table.

Experiment	V_s	V_o
1	12 V	4 V
2		16 V
3	1 V	
4		−2 V

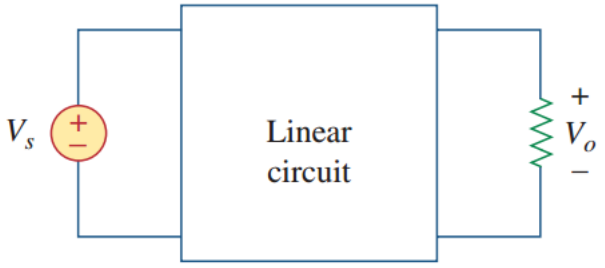

Figure 4.74
For Prob. 4.6.

4.12 Determine v_o in the circuit of Fig. 4.80 using the superposition principle.

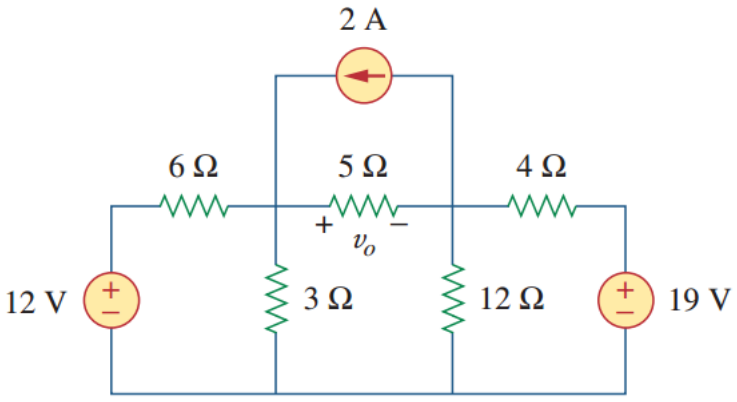

Figure 4.80
For Prob. 4.12.

4.22 For the circuit in Fig. 4.90, use source transformation to find i.

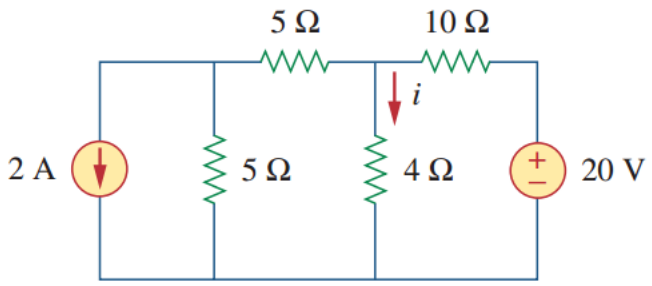

Figure 4.90
For Prob. 4.22.

4.30 Use source transformation on the circuit shown in Fig 4.98 to find i_x.

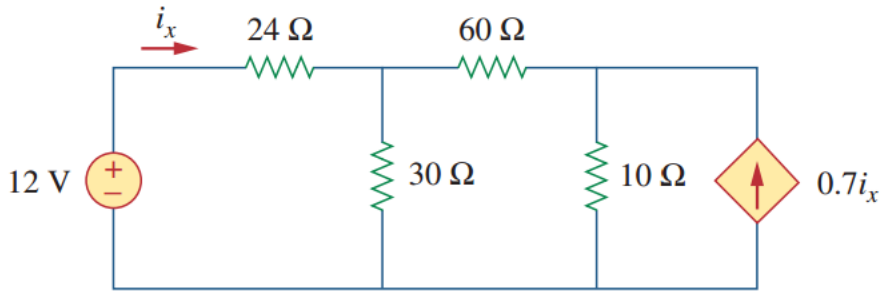

Figure 4.98
For Prob. 4.30.

4.34 Using Fig. 4.102, design a problem that will help other students better understand Thevenin equivalent circuits.

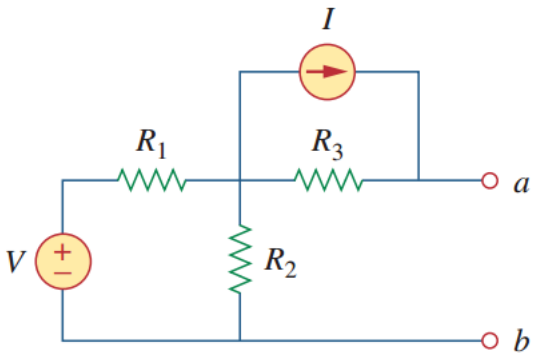

Figure 4.102
For Probs. 4.34 and 4.49.

4.52 For the transistor model in Fig. 4.118, obtain the Thevenin equivalent at terminals *a*-*b*.

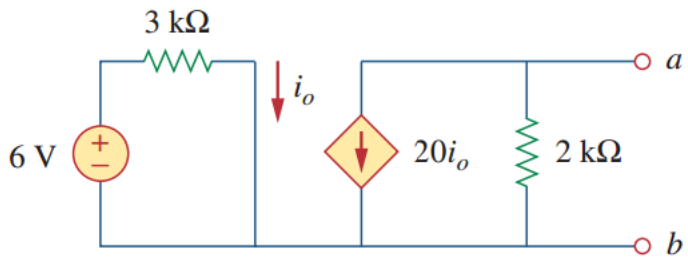

Figure 4.118
For Prob. 4.52.

*4.60 For the circuit in Fig. 4.126, find the Thevenin and Norton equivalent circuits at terminals *a*-*b*.

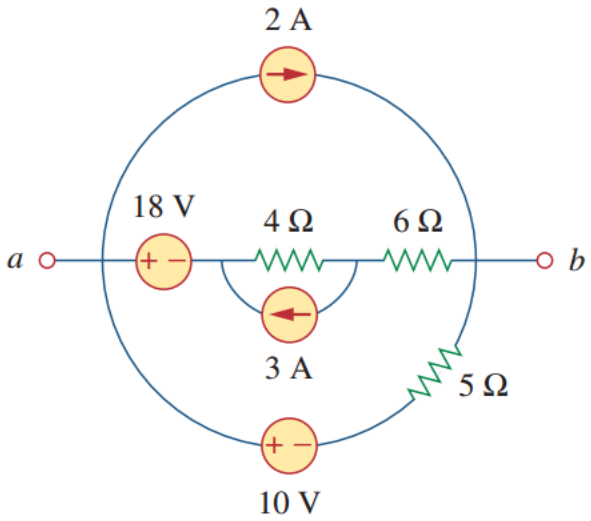

Figure 4.126
For Probs. 4.60 and 4.81.

*4.75 For the circuit in Fig. 4.141, determine the value of R such that the maximum power delivered to the load is 3 mW.

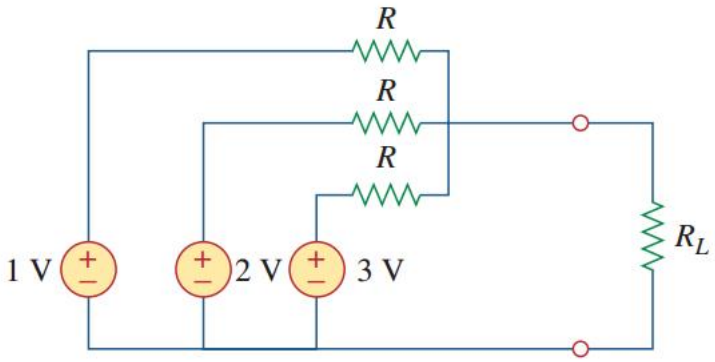

Figure 4.141
For Prob. 4.75.

4.78 Use *PSpice or MultiSim* to solve Prob. 4.52.