

Diefenderfer & Holton Problems from Chapter 1

18. Using Thévenin's theorem, determine the effective voltage and the effective resistance of the circuit in Figure E with  $V_2$  removed.

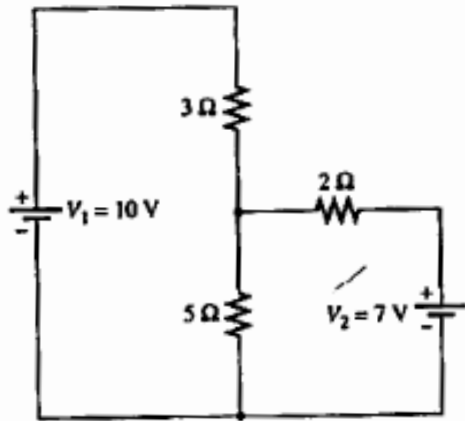


FIGURE E Circuit for problem 18.

23. In the circuit of Figure G, compute the current in the  $3\ \Omega$  resistor and find the value of  $V_2$ .

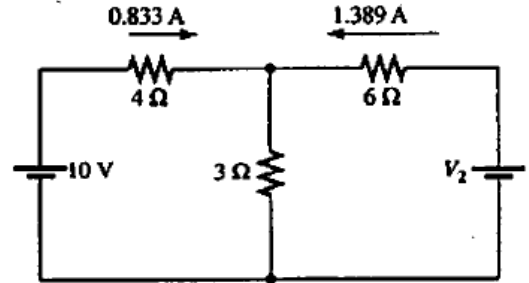


FIGURE G Circuit for problem 23.

24. In the circuit of Figure H, find the value of  $V_3$  such that the current through the  $10\ \Omega$  resistor is zero.

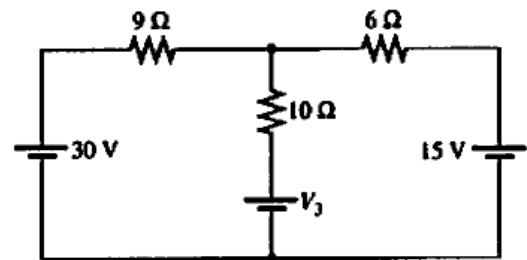


FIGURE H Circuit for problem 24.

25. Compute the current in each of the resistors in the circuit of Figure I.

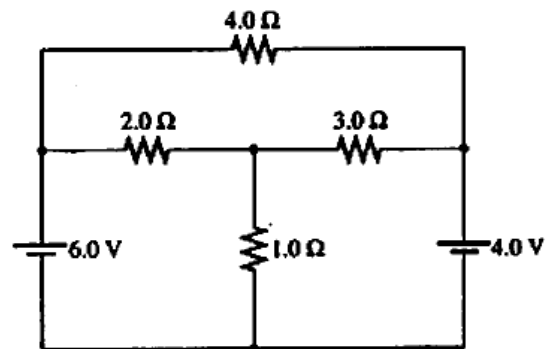


FIGURE I Circuit for problem 25.