

Chapter 1, Problem 1.

How many coulombs are represented by these amounts of electrons:

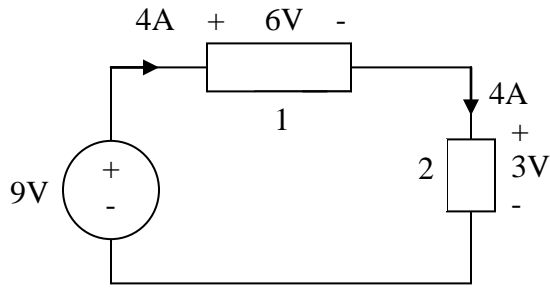
(a) 6.482×10^{17}

(b) 1.24×10^{18}

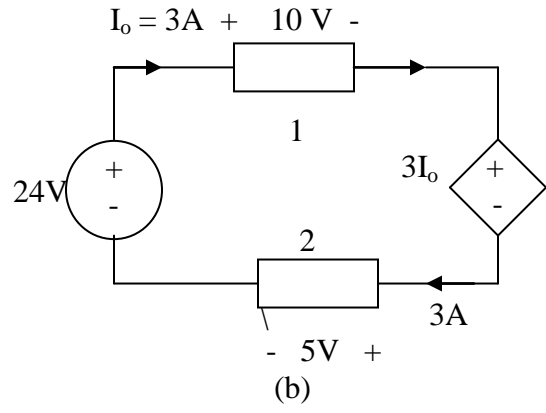
(c) 2.46×10^{19}

(d) 1.628×10^{20}

1.18 Calculate the power absorbed or supplied by each element in Fig. 1.29



(a)



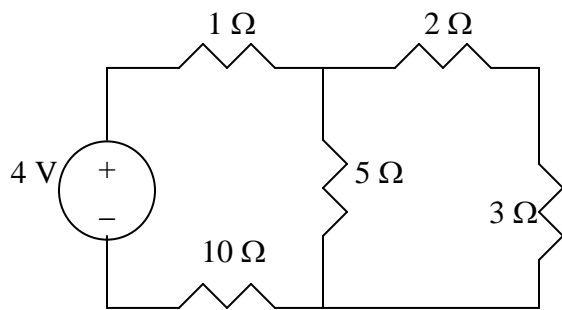
(b)

Figure 1.29
For Prob. 1.18

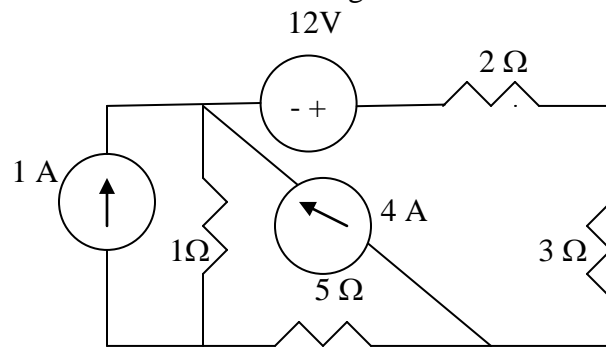
Chapter 1, Problem 22.

A lightning bolt strikes an airplane with 30 kA for 2 ms. How many coulombs of charge are deposited on the plane?

2.7 Find the number of branches and nodes in each of the circuits of Fig. 2.71.



(a)



(b)

Figure 2.71
For Prob. 2.7

Chapter 2, Problem 10.

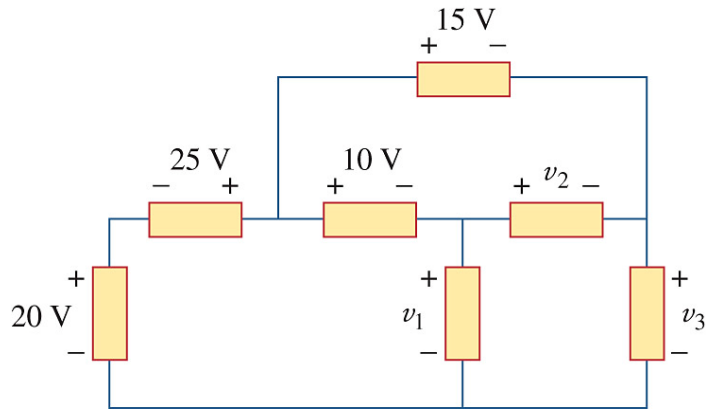
In the circuit in Fig. 2.67 decrease in R_3 leads to a decrease of:

- (a) current through R_3
- (b) voltage through R_3
- (c) voltage across R_1
- (d) power dissipated in R_2
- (e) none of the above

Chapter 2, Problem 12.

In the circuit in Fig. 2.76, obtain v_1 , v_2 , and v_3 .

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Chapter 2, Problem 14.

Given the circuit in Fig. 2.78, use KVL to find the branch voltages V_1 to V_4 .

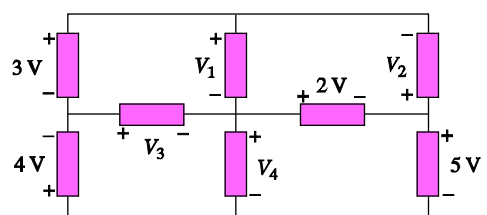


Figure 2.78