

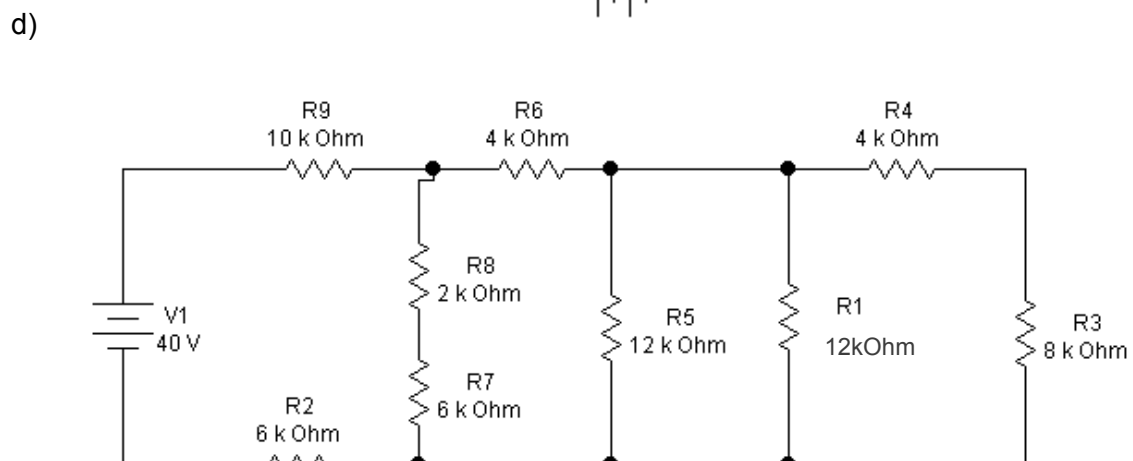
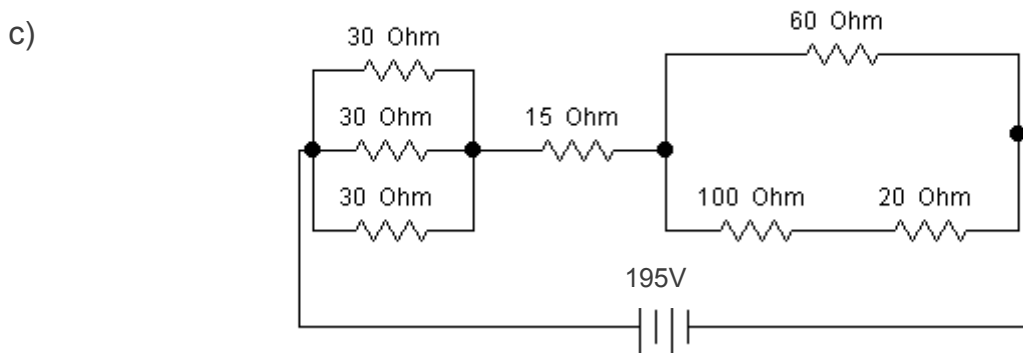
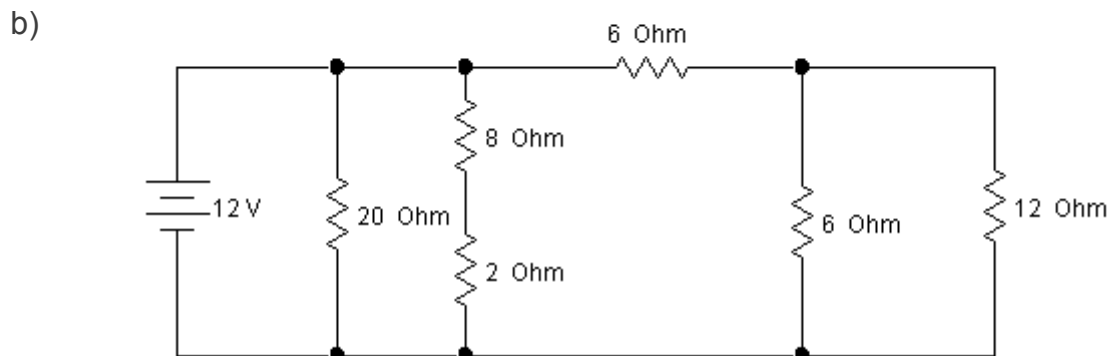
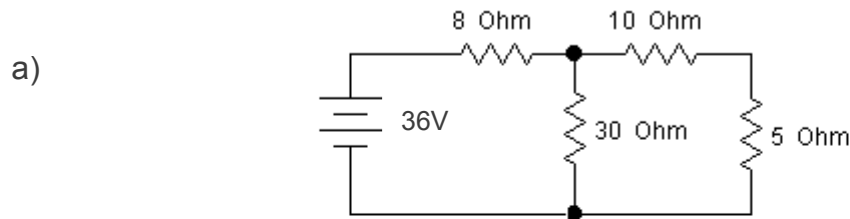
Disciplina: Análise de Circuitos I

Professor Alexandre Moreira

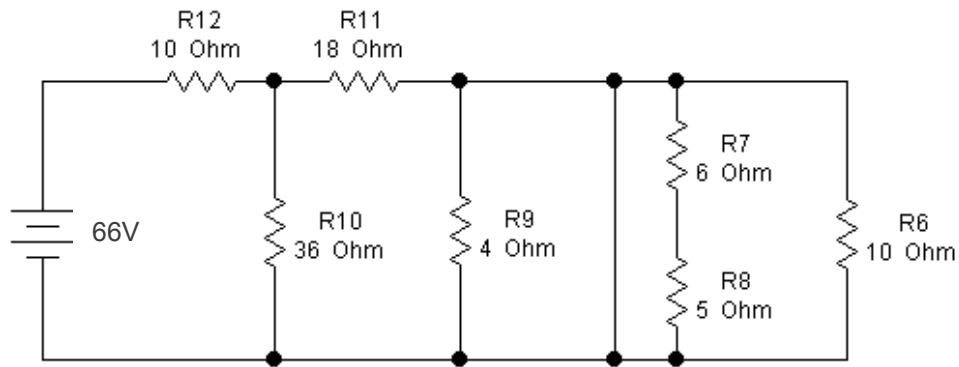
Aluno: \_\_\_\_\_

Lista de Exercícios – 6

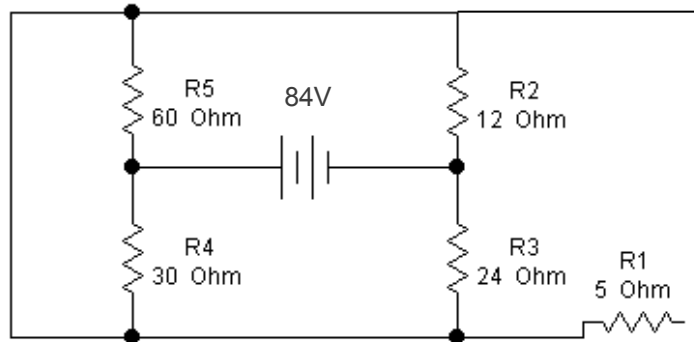
1. Para os circuitos abaixo apresentados, obter a resistência equivalente vista pela fonte de tensão.
2. Obter a tensão e a corrente em cada elemento destes mesmos circuitos. Use seus conhecimentos, aplicando o que você aprendeu até o momento (KVL, KCL, Lei de OHM, divisor de corrente, divisor de tensão)



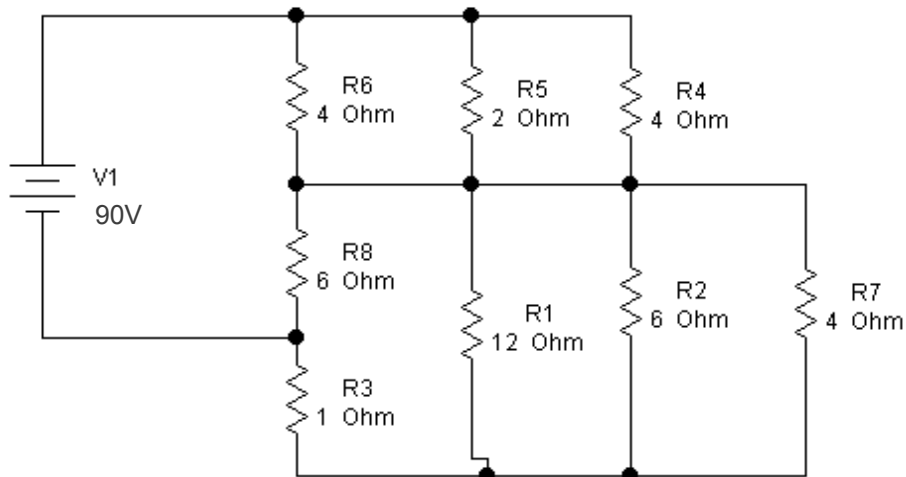
e)



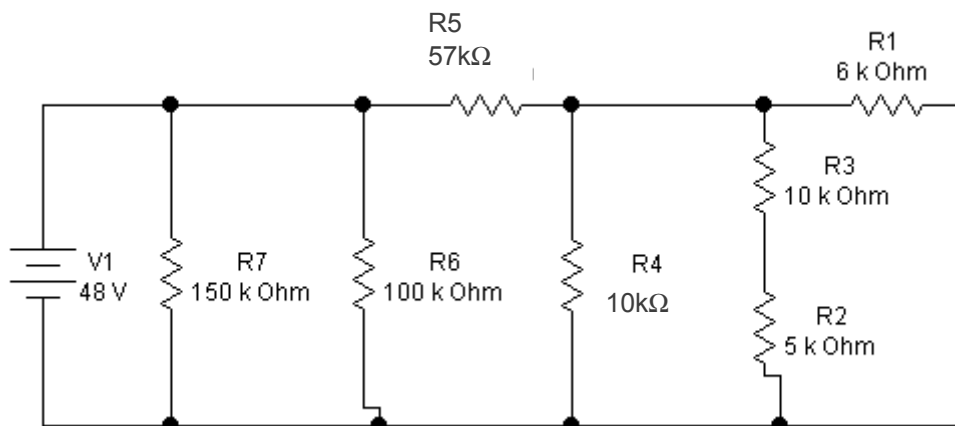
f)



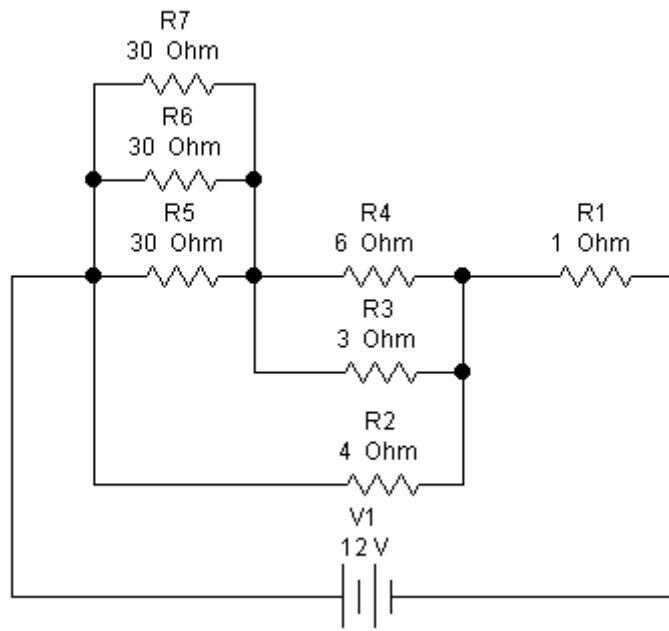
g)



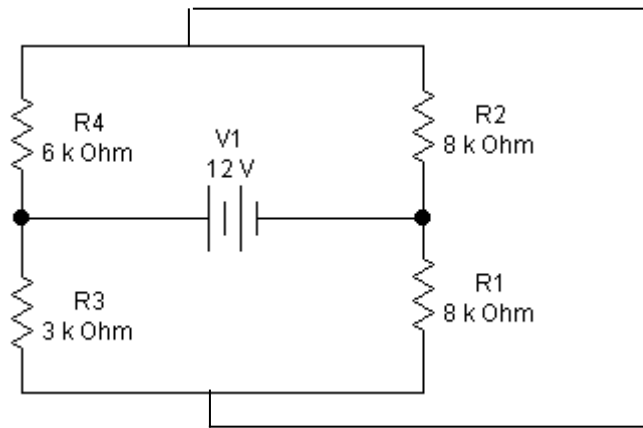
h)



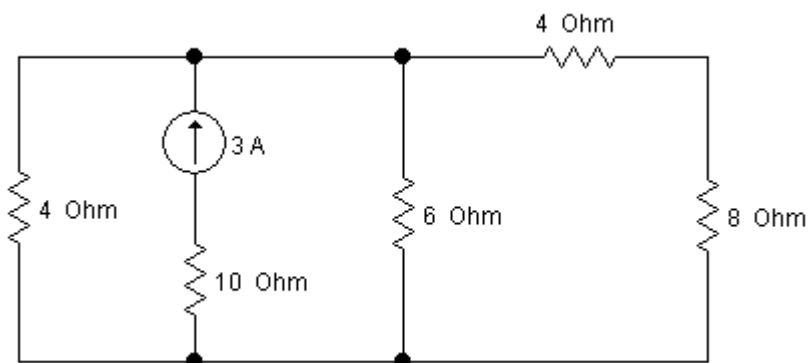
i)



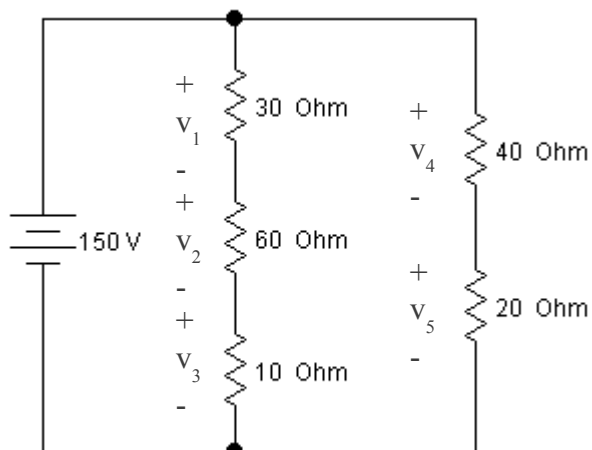
j)



3. Para o circuito a seguir, determinar as correntes nos resistores.

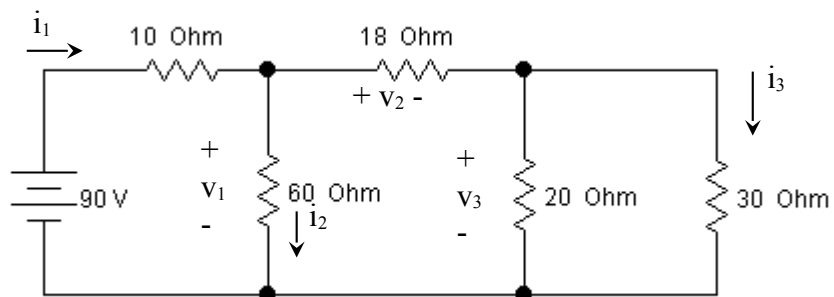


4. Considerando o circuito apresentado a seguir, determinar as tensões indicadas, utilizando divisores de tensão.

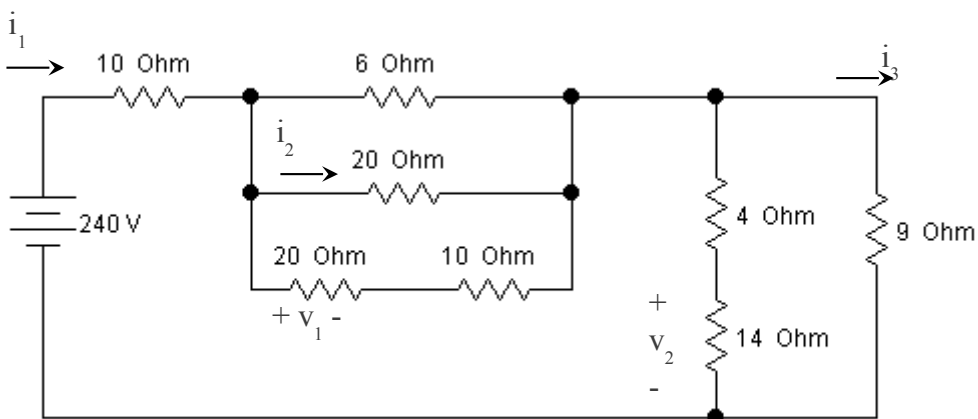


5. Para os circuitos a seguir, determinar a resistência equivalente vista pela fonte e as tensões e correntes indicadas.

a)

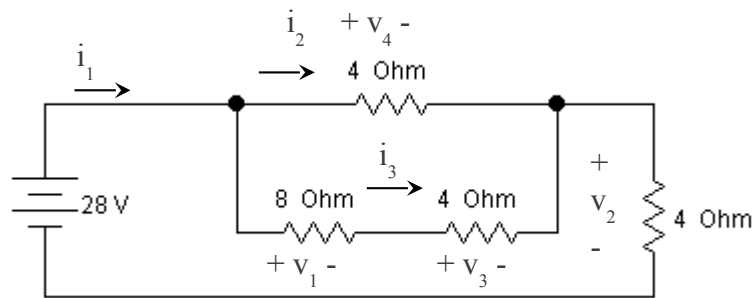


b)

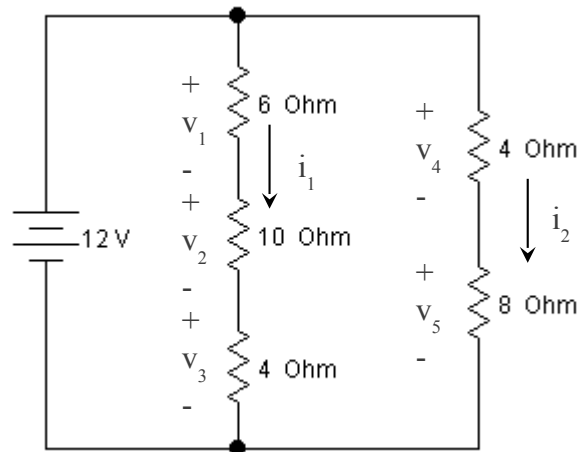


6. Para o circuito abaixo, determinar a corrente e a tensão em cada resistor.

a)



b)



Respostas:

- a)  $R_{eq} = 18\Omega$        $I_T = 2A$
- b)  $R_{eq} = 4\Omega$        $I_T = 3A$
- c)  $R_{eq} = 65\Omega$        $I_T = 3A$
- d)  $R_{eq} = 20k\Omega$        $I_T = 2mA$
- e)  $R_{eq} = 22\Omega$        $I_T = 3A$
- f)  $R_{eq} = 28\Omega$        $I_T = 3A$
- g)  $R_{eq} = 3\Omega$        $I_T = 30A$
- h)  $R_{eq} = 30k\Omega$        $I_T = 1,6mA$
- i)  $R_{eq} = 4\Omega$        $I_T = 3A$
- j)  $R_{eq} = 6\Omega$        $I_T = 2A$

- 3)  $I_1 = 1,5A$        $I_2 = 1A$        $I_3 = 0,5A$
- 4)  $V_1 = 45V$        $V_2 = 90V$        $V_3 = 100V$        $V_4 = 50V$
- 5)  $R_{eq} = 30\Omega$        $I_T = 3A$        $I_1 = 3A$        $I_2 = 1A$        $I_3 = 0,8A$        $V_1 = 60V$        $V_2 = 36V$        $V_3 = 24V$   
 $R_{eq} = 20\Omega$        $I_T = 12A = I_1$        $I_2 = 2,4A$        $I_3 = 8A$        $V_1 = 32V$        $V_2 = 56V$
- 6)  $R_{eq} = 7\Omega$        $I_1 = 4A$        $I_2 = 3A$        $I_3 = 1A$        $V_1 = 8V$        $V_2 = 16V$        $V_3 = 4V$        $V_4 = 12V$   
 $R_{eq} = 7,5\Omega$        $I_T = 1,6A$        $I_1 = 0,6A$        $I_2 = 1A$        $V_1 = 3,6V$        $V_2 = 6V$        $V_3 = 2,4V$        $V_4 = 5V$        $V_5 = 8V$