

✓ **Congratulations! You passed!**  
TO PASS 70% or higher

Keep Learning

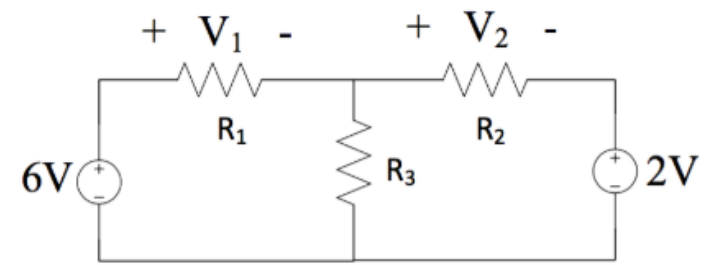
GRADE  
90%

## Module 2 Quiz

LATEST SUBMISSION GRADE  
90%

1. In the following circuit, there are 2 voltage sources of 6 V and 2 V.  $V_2$  is given as 1 V.

1 / 1 point

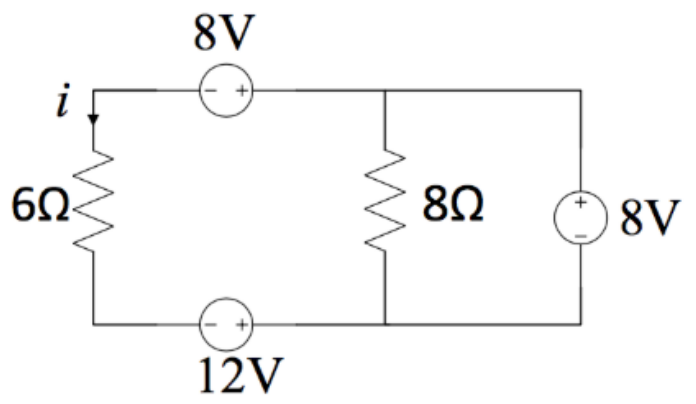


Determine the value of  $V_1$ . Enter the value in the box below without the units.

✓ Correct

2. For the circuit below, what is the current  $i$ ?

1 / 1 point

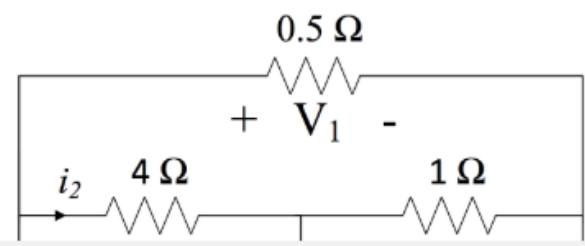


Enter the value in the box below without the units.

✓ Correct

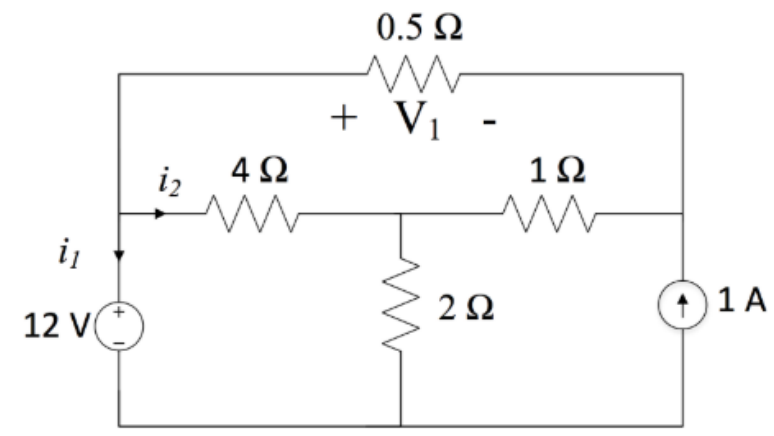
3. For the circuit below,  $V_1 = 0.5\Omega$   $i_2 = 1A$ .

0 / 1 point



3. For the circuit below,  $V_1 = 0.5\Omega$   $i_2 = 1A$ .

0 / 1 point

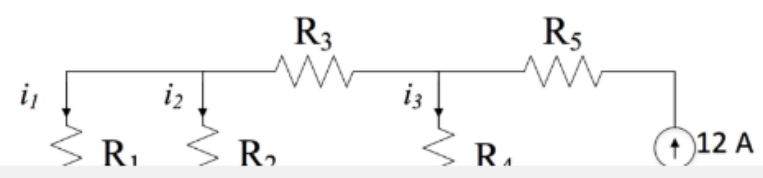


Determine the value of  $i_1$  in Amps. Enter the value in the box below without the units.

! Incorrect  
 The answer you gave is not a number.

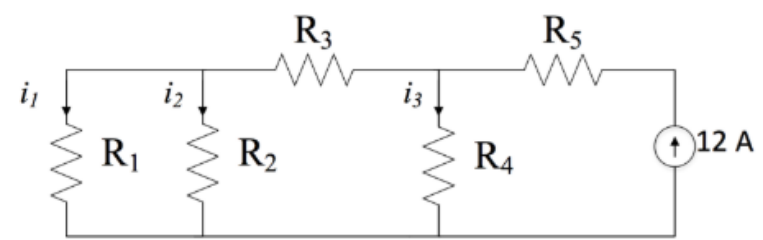
4. For the circuit below,  $i_1 = 1A$ ,  $i_2 = 2A$ .

1 / 1 point



4. For the circuit below,  $i_1 = 1A$ ,  $i_2 = 2A$ .

1 / 1 point

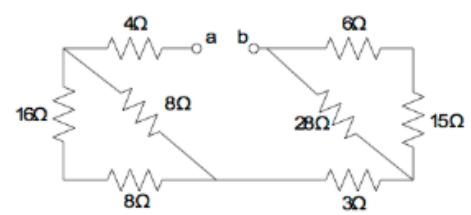


Determine the value of  $i_3$  in Amps. Enter the value in the box below without units.

✓ Correct

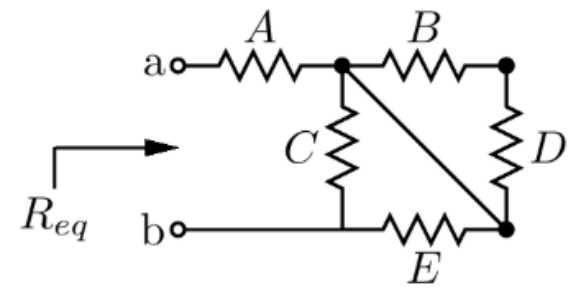
5. For the circuit shown below, find the equivalent resistance between terminals a and b. Enter your answer in Ohms, without the units.

1 / 1 point



6. Select the correct  $R_{eq}$  equation for the following resistor network.

1 / 1 point



- ☒  $R_{eq} = A + (C \parallel E)$
- ☐  $R_{eq} = A + [(B + D) \parallel (C + E)]$
- ☐  $R_{eq} = A + [C \parallel (B + D + E)]$
- ☐  $R_{eq} = (A + C) \parallel E$

✓ Correct

7. You are given the following circuit. Voltage  $V_1$  is the voltage across  $R_1$  and  $V_2$  is across  $R_2$ . If the ratio between  $R_1$  and  $R_2$  is 5 to 1, i.e.,  $R_1/R_2 = 5/1$ , what is the ratio of  $V_1$  to  $V_2$ ,  $V_1/V_2 = ?$

1 / 1 point

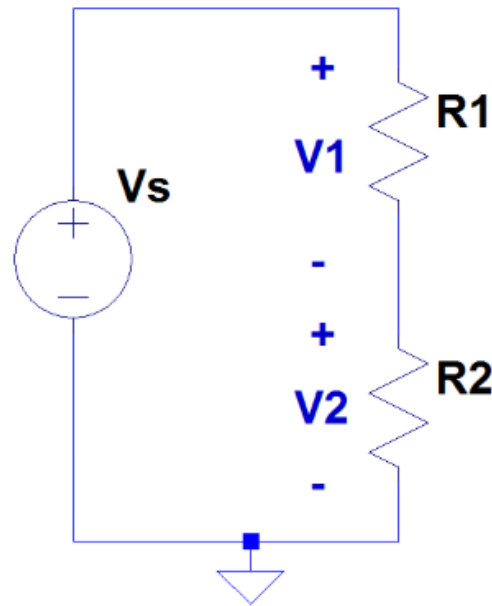
Round your answer to two decimal places if necessary. Omit unit.



7. You are given the following circuit. Voltage  $V_1$  is the voltage across  $R_1$  and  $V_2$  is across  $R_2$ . If the ratio between  $R_1$  and  $R_2$  is 5 to 1, i.e.,  $R_1/R_2 = 5/1$ , what is the ratio of  $V_1$  to  $V_2$ ,  $V_1/V_2 = ?$

1 / 1 point

Round your answer to two decimal places if necessary. Omit unit.



5

✓ Correct

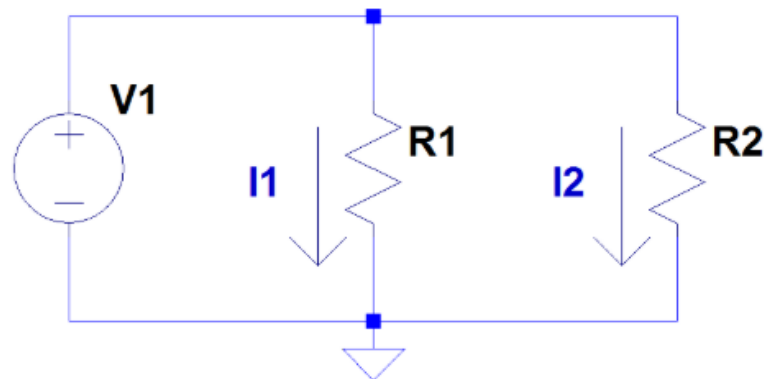
8. You are given the following circuit. Current  $I_1$  flows through  $R_1$  and  $I_2$  flows through  $R_2$ . If the ratio between  $R_1$  and  $R_2$  is 1 to 4, i.e.,  $R_1/R_2 = 1/4$ , what is the ratio of  $I_1$  to  $I_2$ ,  $I_1/I_2 = ?$

1 / 1 point

8. You are given the following circuit. Current  $I_1$  flows through  $R_1$  and  $I_2$  flows through  $R_2$ . If the ratio between  $R_1$  and  $R_2$  is 1 to 4, i.e.,  $R_1/R_2 = 1/4$ , what is the ratio of  $I_1$  to  $I_2$ ,  $I_1/I_2 = ?$

1 / 1 point

Round your answer to two decimal places if necessary. Omit unit.

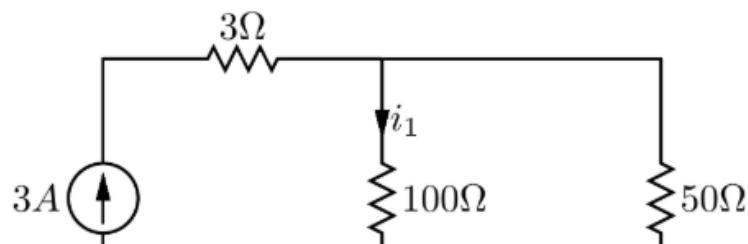


4

✓ Correct

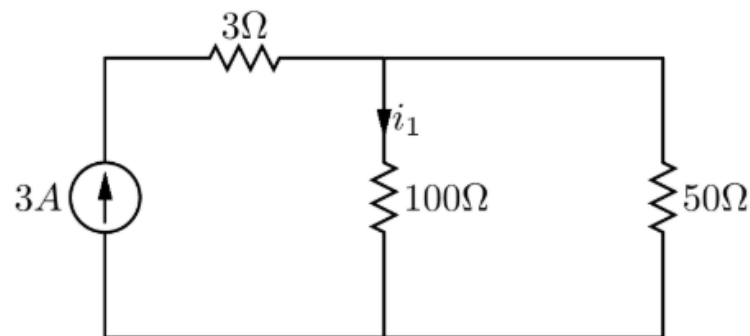
9. Solve for the branch current  $i_1$  in the following schematic.

1 / 1 point



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1 / 1 point



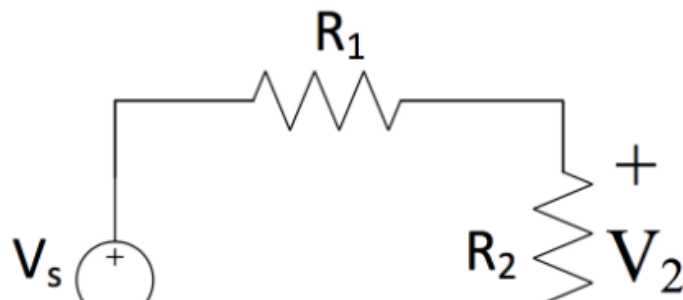
Enter only the numerical answer for  $i_1$  in the text box. You do not need to include the units.

1

✓ Correct

10. For the circuit below,  $V_s = 30V$ ,  $R_1 = 5\Omega$ ,  $R_2 = 15\Omega$  and  $R_3 = 10\Omega$ .

1 / 1 point



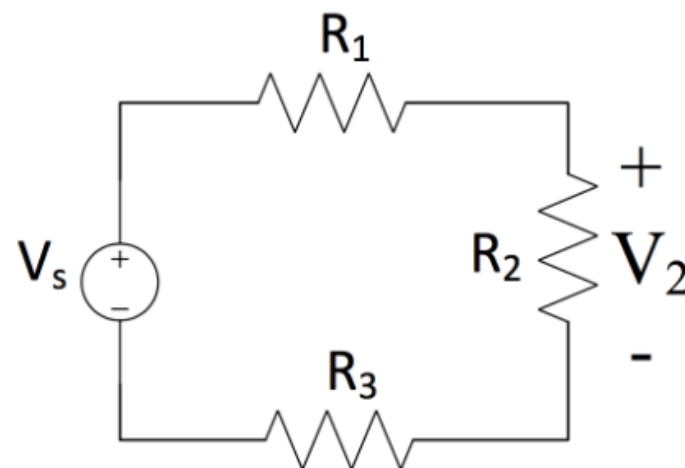


1

✓ Correct

10. For the circuit below,  $V_s = 30V$ ,  $R_1 = 5\Omega$ ,  $R_2 = 15\Omega$  and  $R_3 = 10\Omega$ .

1 / 1 point



Determine the value of  $V_2$  in Volts. Enter the value in the box below without the units.

15

✓ Correct