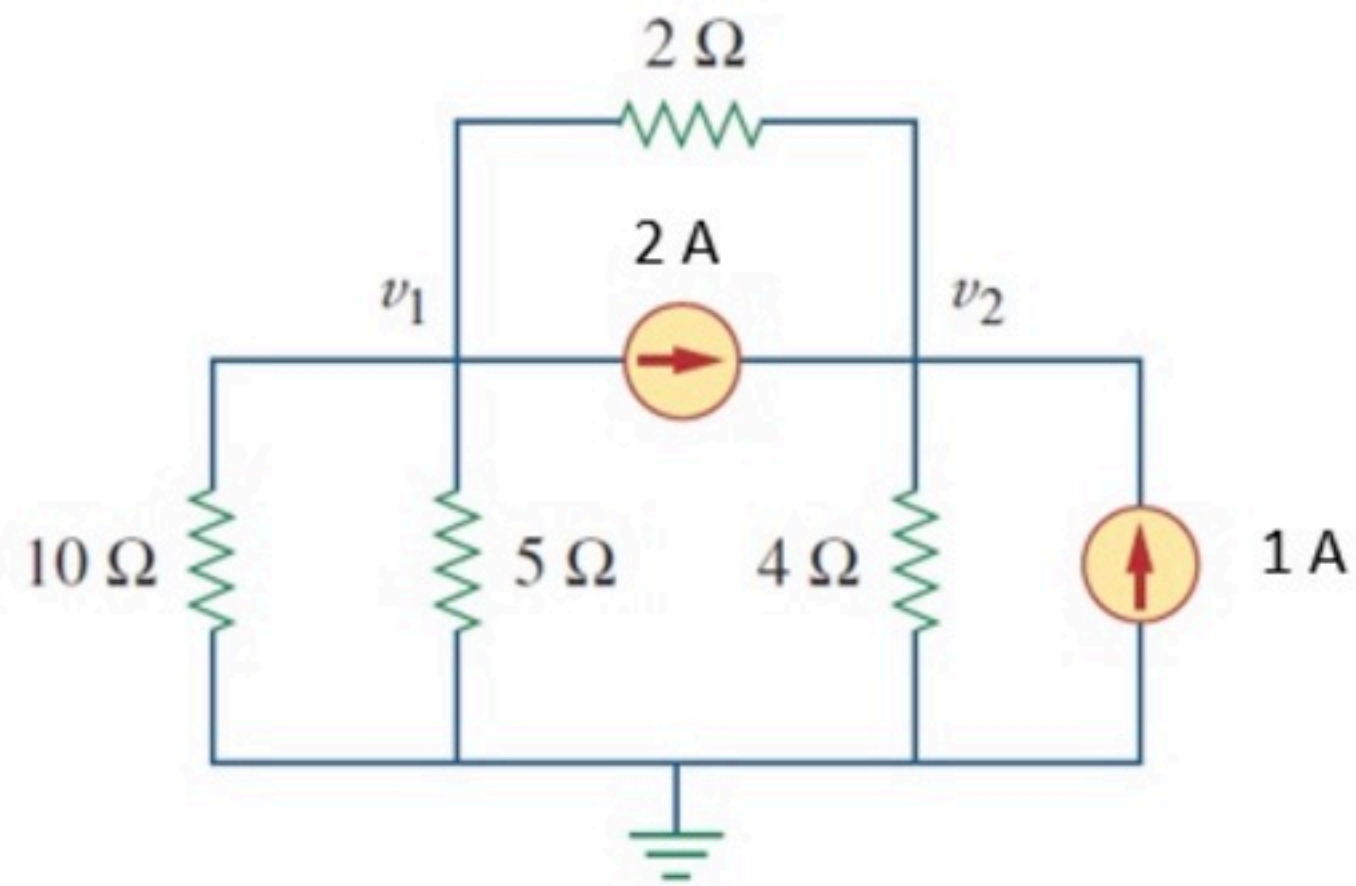


PP - Nodal Mesh 001

Problem has been graded.

Find v_1 and v_2 . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

v_1 (V) :

0

✓

v_2 (V) :

4

✓

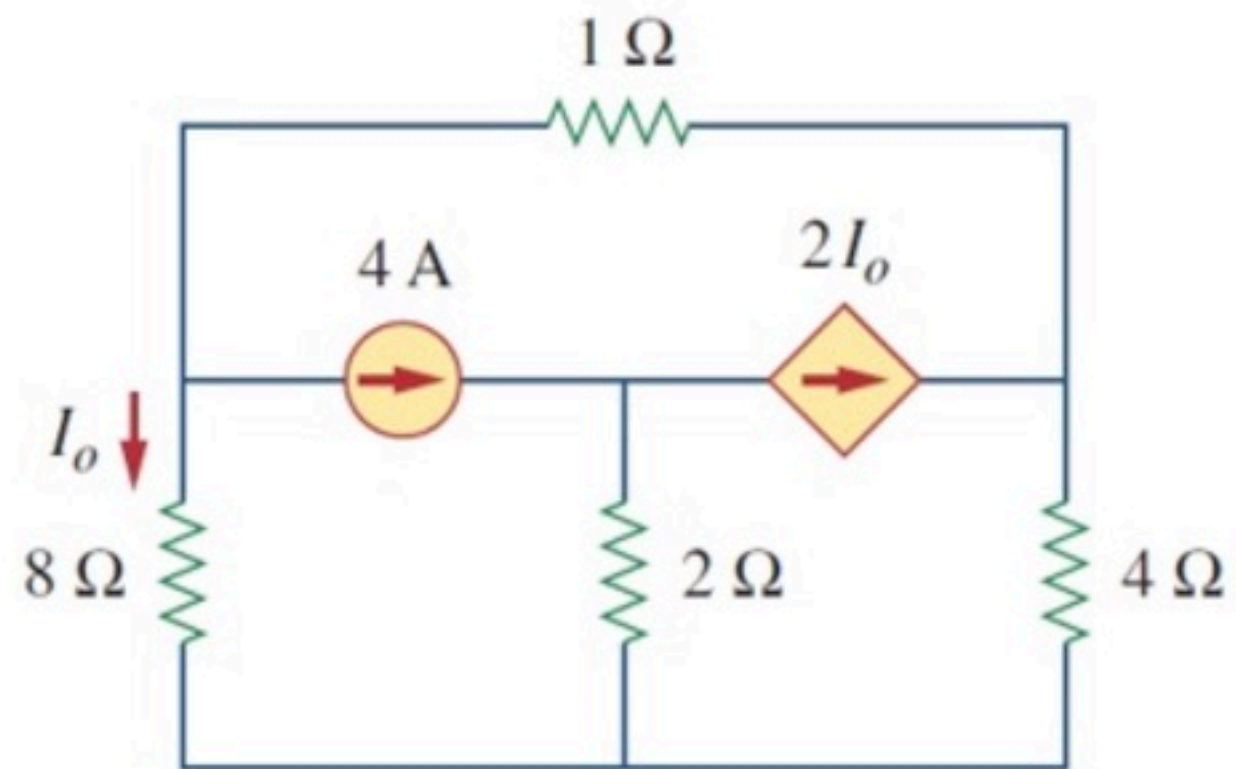
Hint: No supernodes

PP - Nodal Mesh 002

Problem has been graded.

Find I_o . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

I_o (A) :

-4



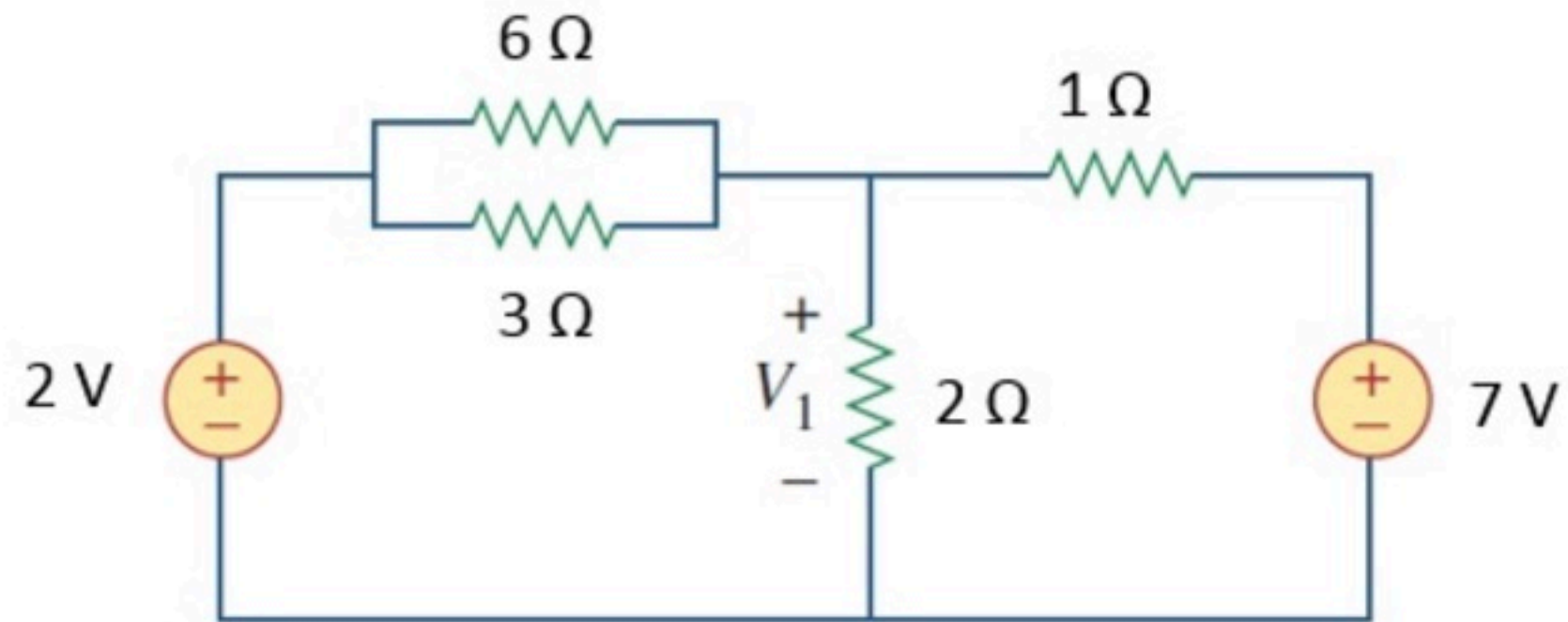
Hint: Write I_o as a function of the node voltages

PP - Nodal Mesh 003

Problem has been graded.

Find V_1 . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

V_1 (V) :

4



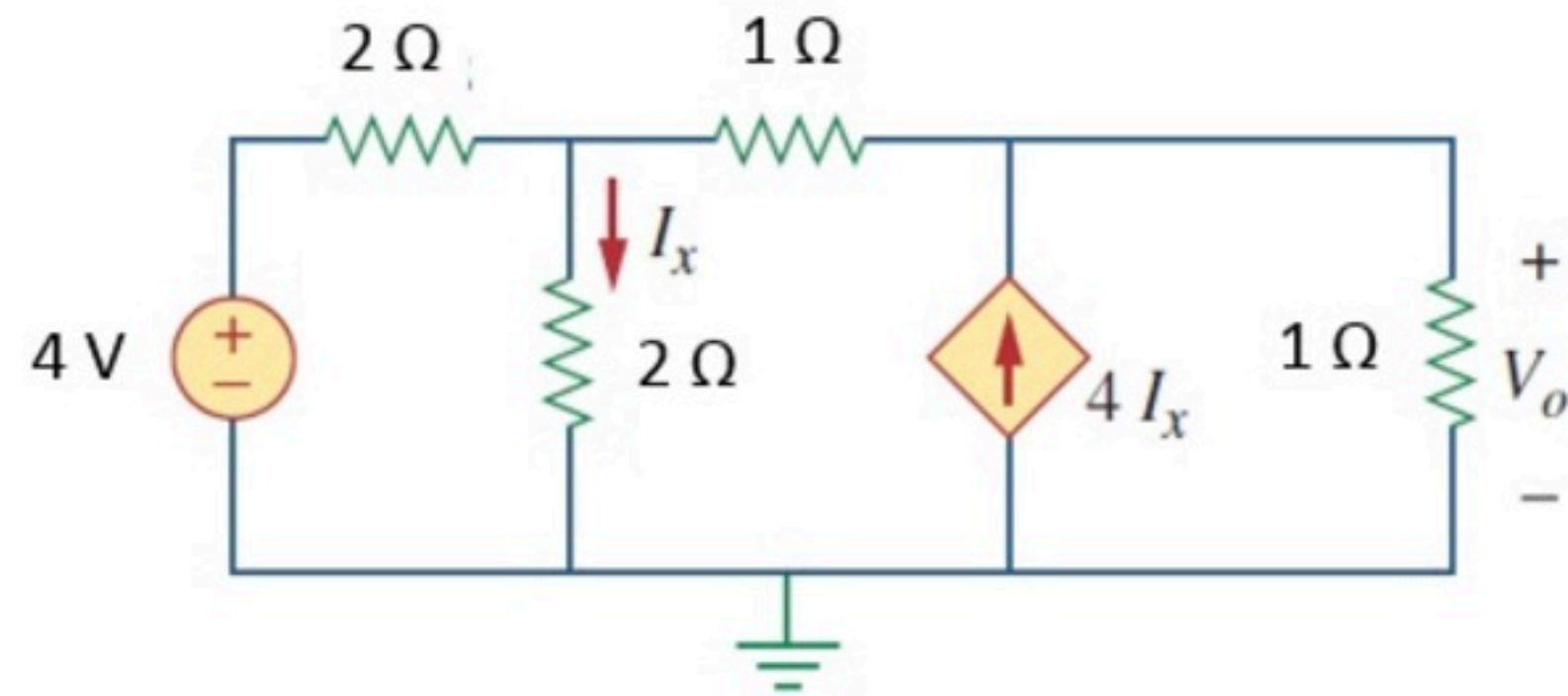
Hint: Choose GND strategically

PP - Nodal Mesh 004

Problem has been graded.

Find V_o . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

V_o (V) :

6



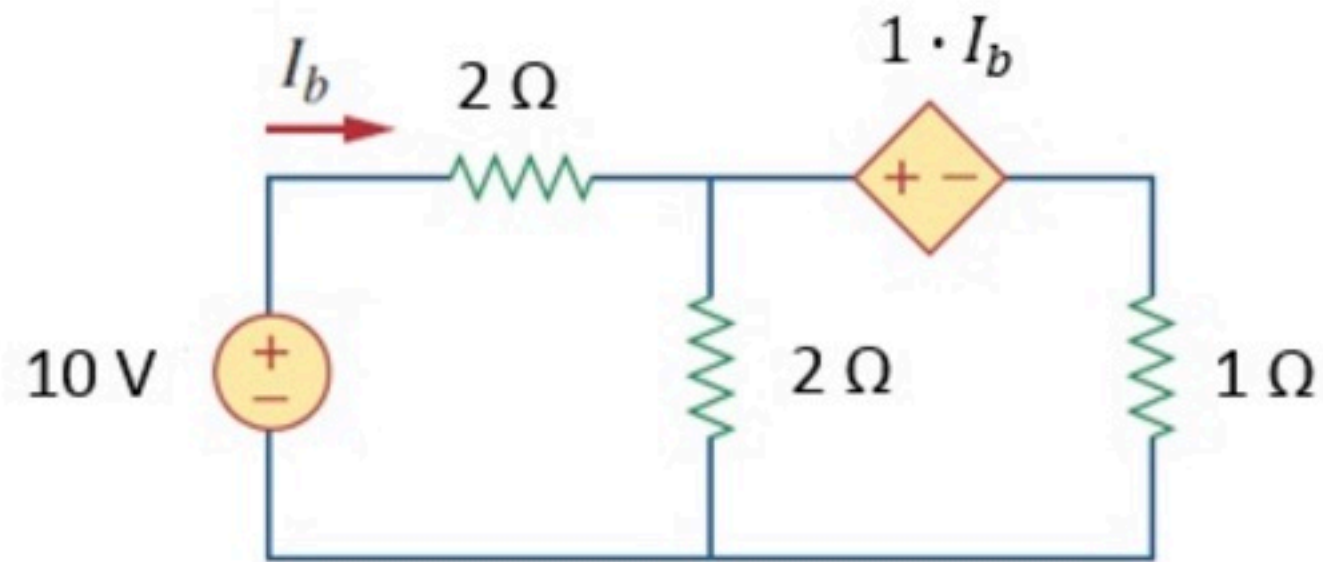
Hint: Express I_x as a function of node voltages

PP - Nodal Mesh 005

Problem has been graded.

Find I_b . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

I_b (A) :

3



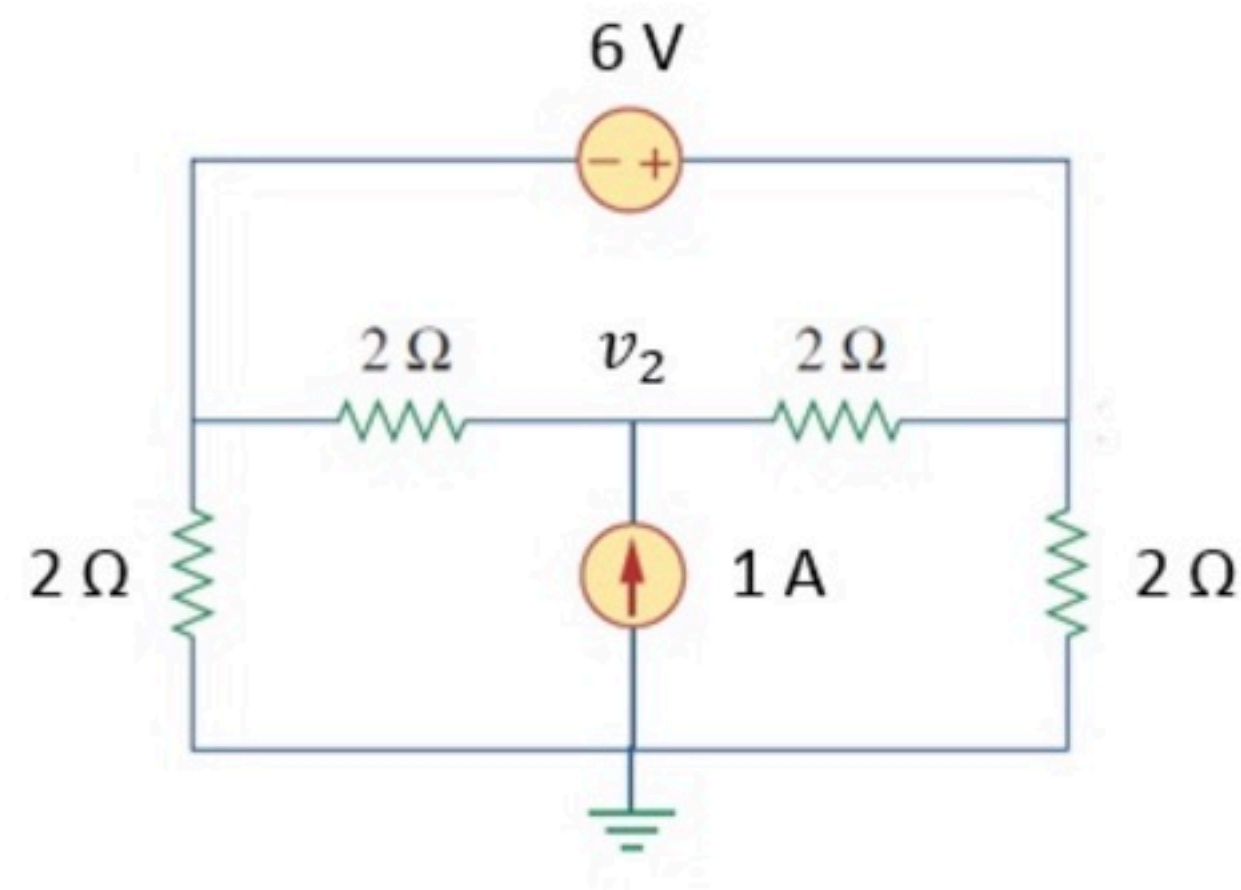
Hint: Need to use a supernode

PP - Nodal Mesh 006

Problem has been graded.

Find v_2 . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

v_2 (V) :

2



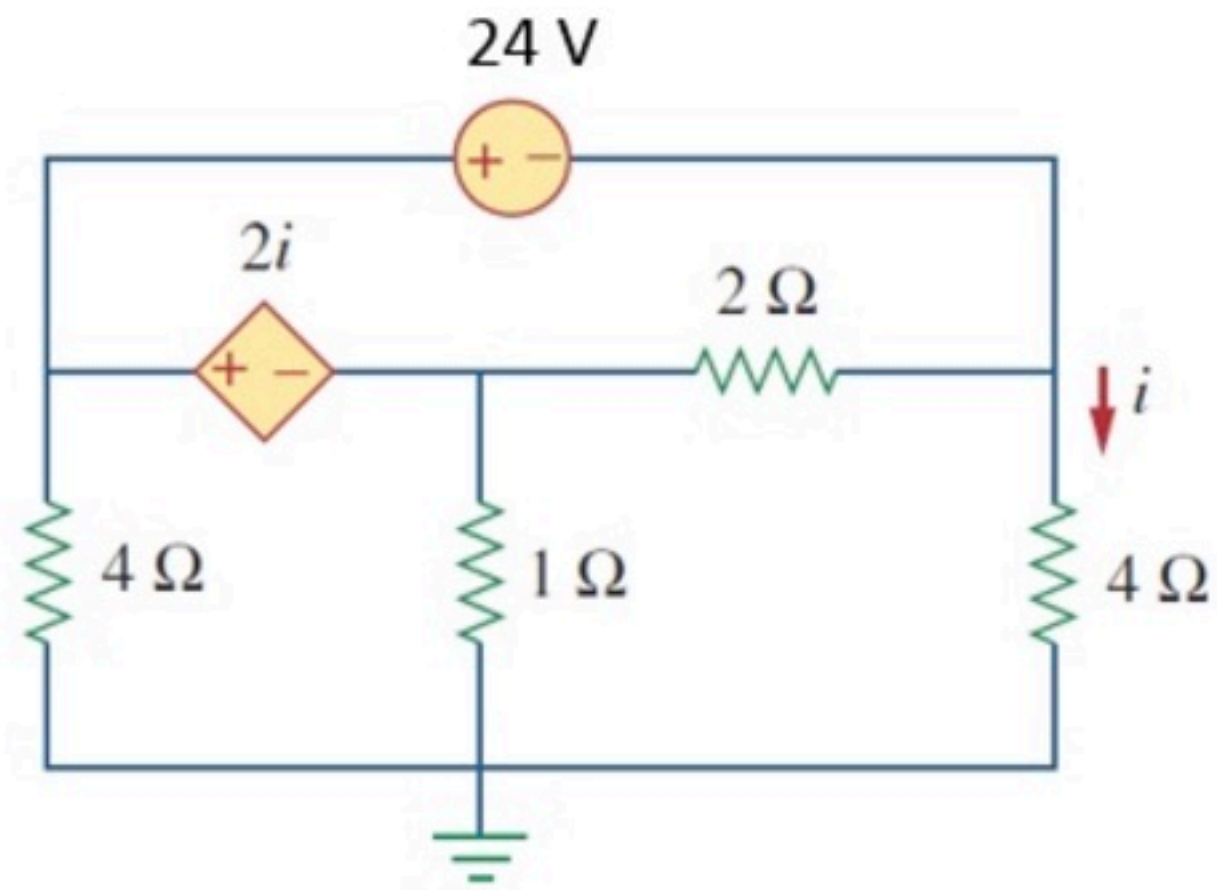
Hint: Use supernode or move GND

PP - Nodal Mesh 007

Problem has been graded.

Find i . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

i (A) :

-7.5

Hint: Use supernode or move GND

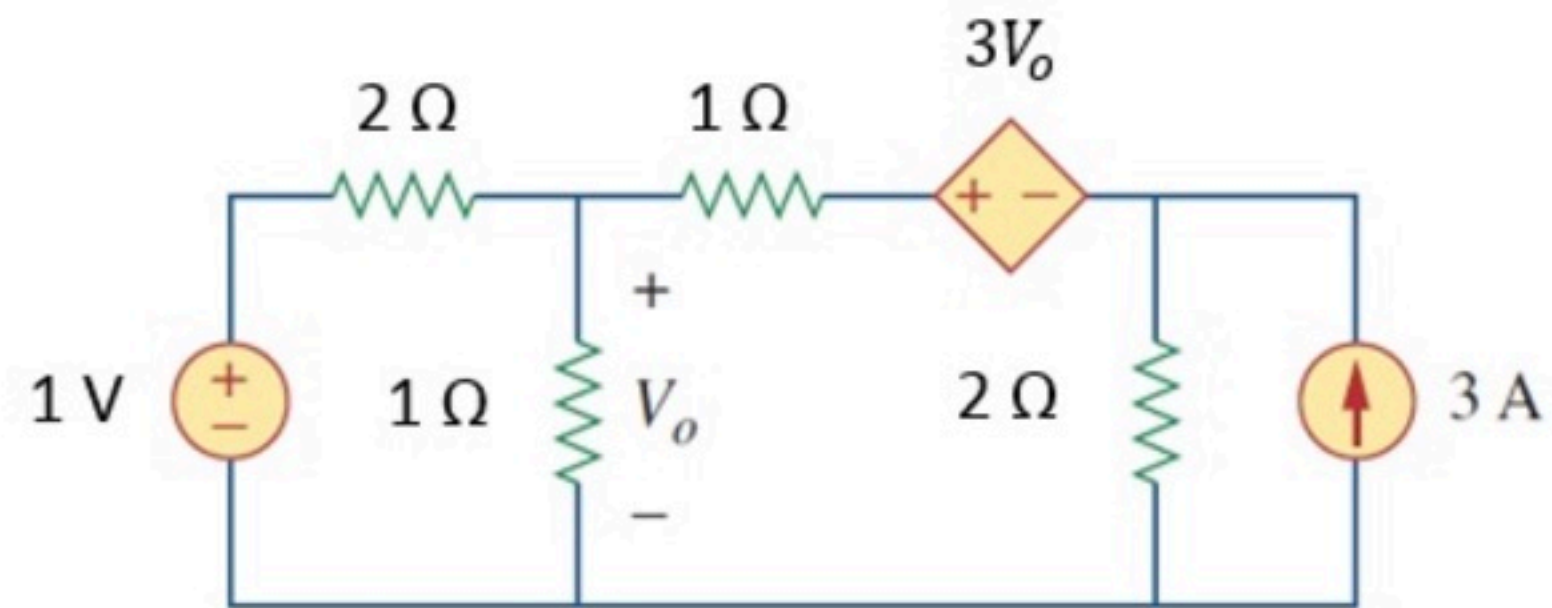


PP - Nodal Mesh 008

Problem has been graded.

Find V_o . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

V_o (V) :

3



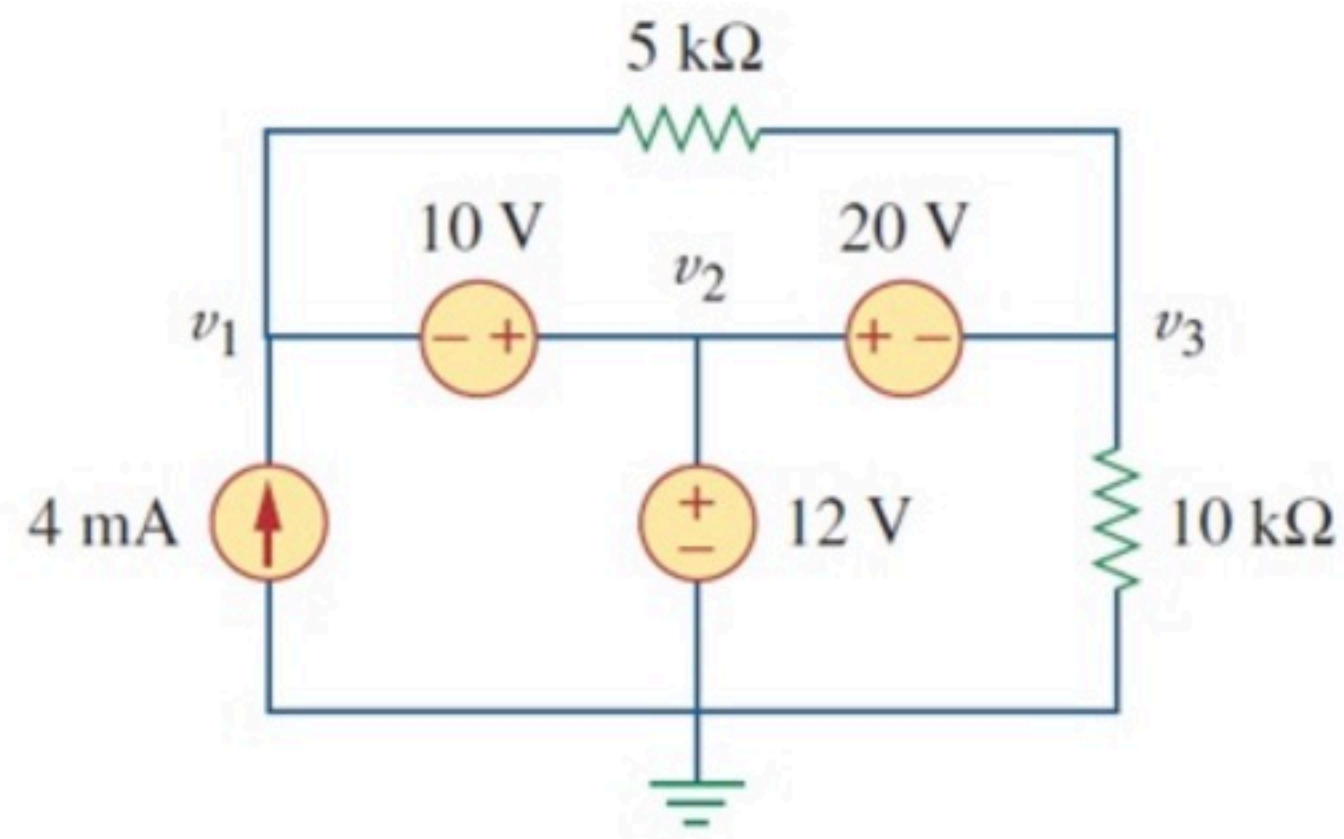
Hint: Use supernode

PP - Nodal Mesh 009

Problem has been graded.

Find v_1 , v_2 and v_3 . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

v_1 (V) :

2



v_2 (V) :

12



v_3 (V) :

-8



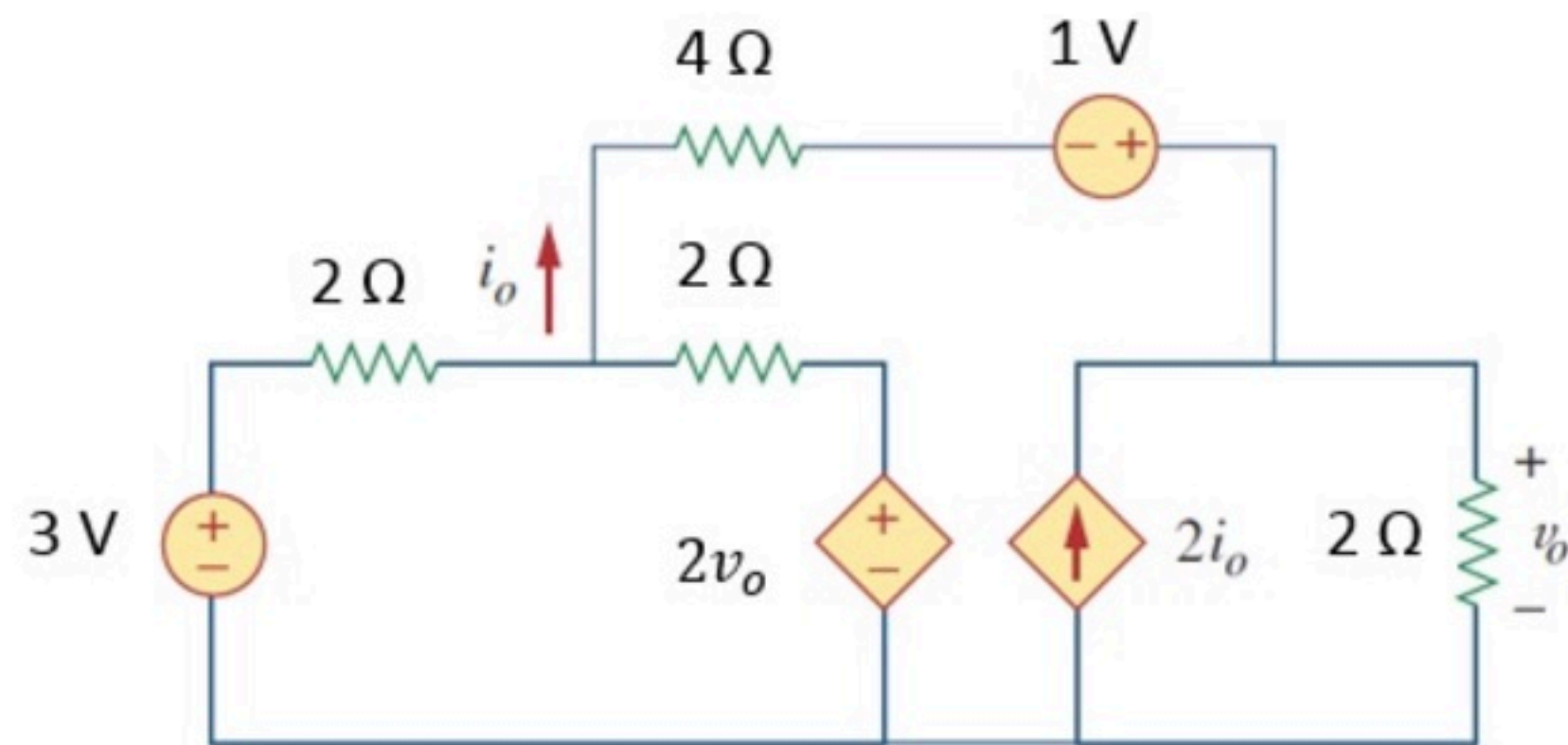
Hint: Check the V-sources

PP - Nodal Mesh 010

Problem has been graded.

Find v_o and i_o . Solve using nodal analysis.

For extra practice: Afterwards solve again using mesh analysis.



Given Variables:

...

Calculate the following:

v_o (V) :

3



i_o (A) :

0.5



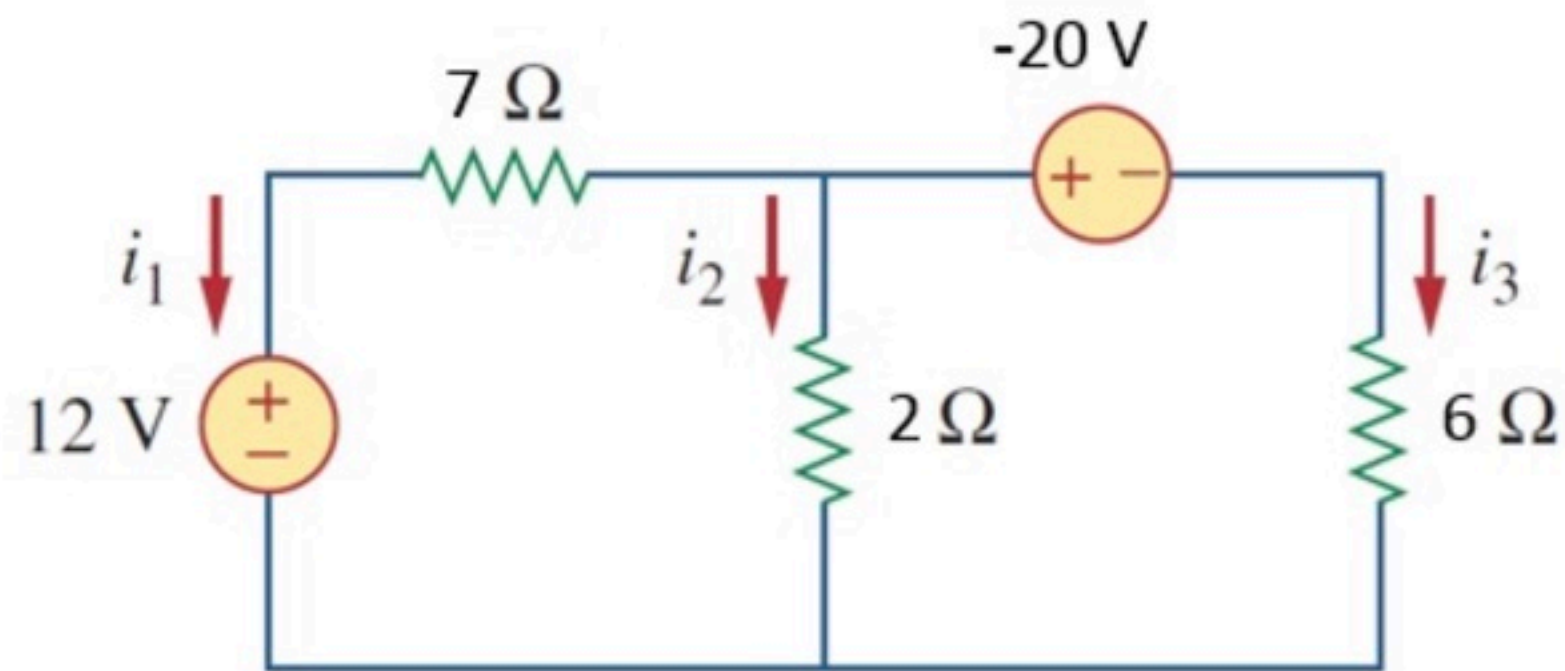
Hint: Select GND strategically and use supernode

PP Nodal Mesh 011

Problem has been graded.

Find the currents i_1 , i_2 , and i_3 . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

i_1 (A) :

-2



i_2 (A) :

-1



i_3 (A) :

3



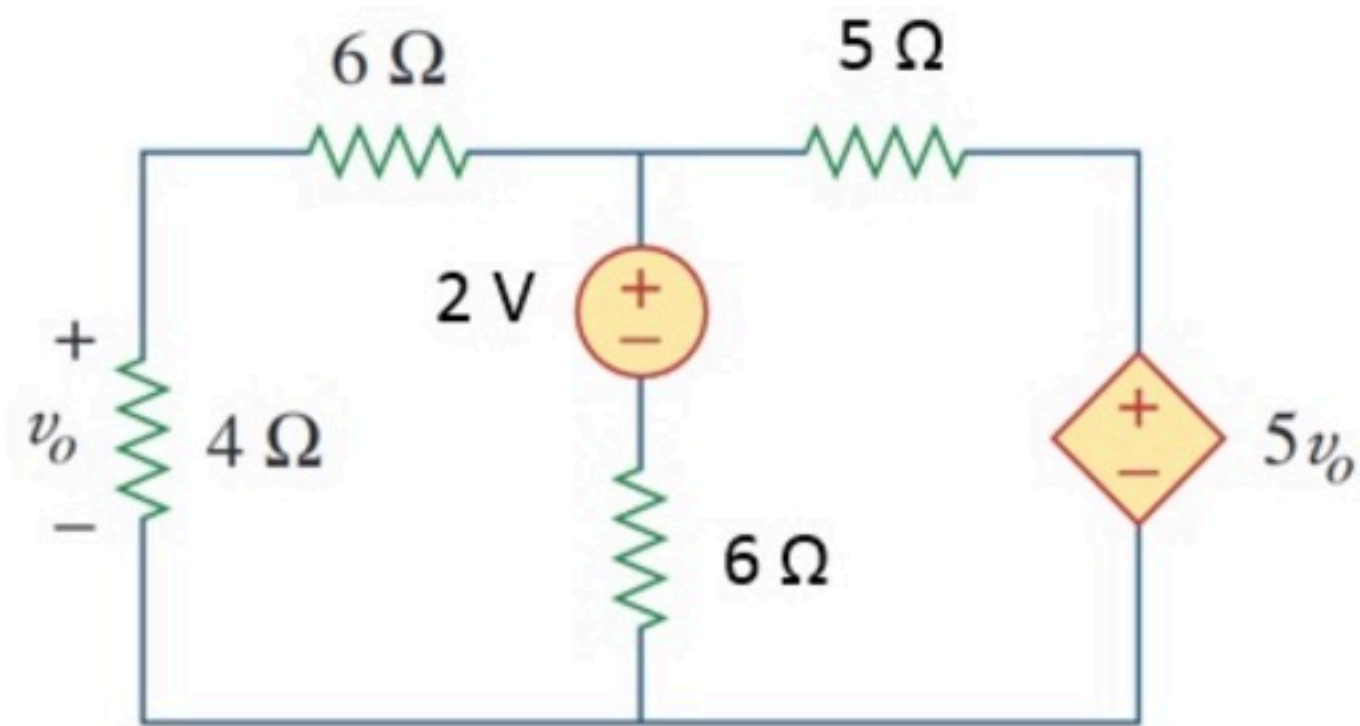
Hint: Define 2 mesh currents

PP Nodal Mesh 012

Unlimited Attempts.

Find the value of v_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

v_o (V) :

2



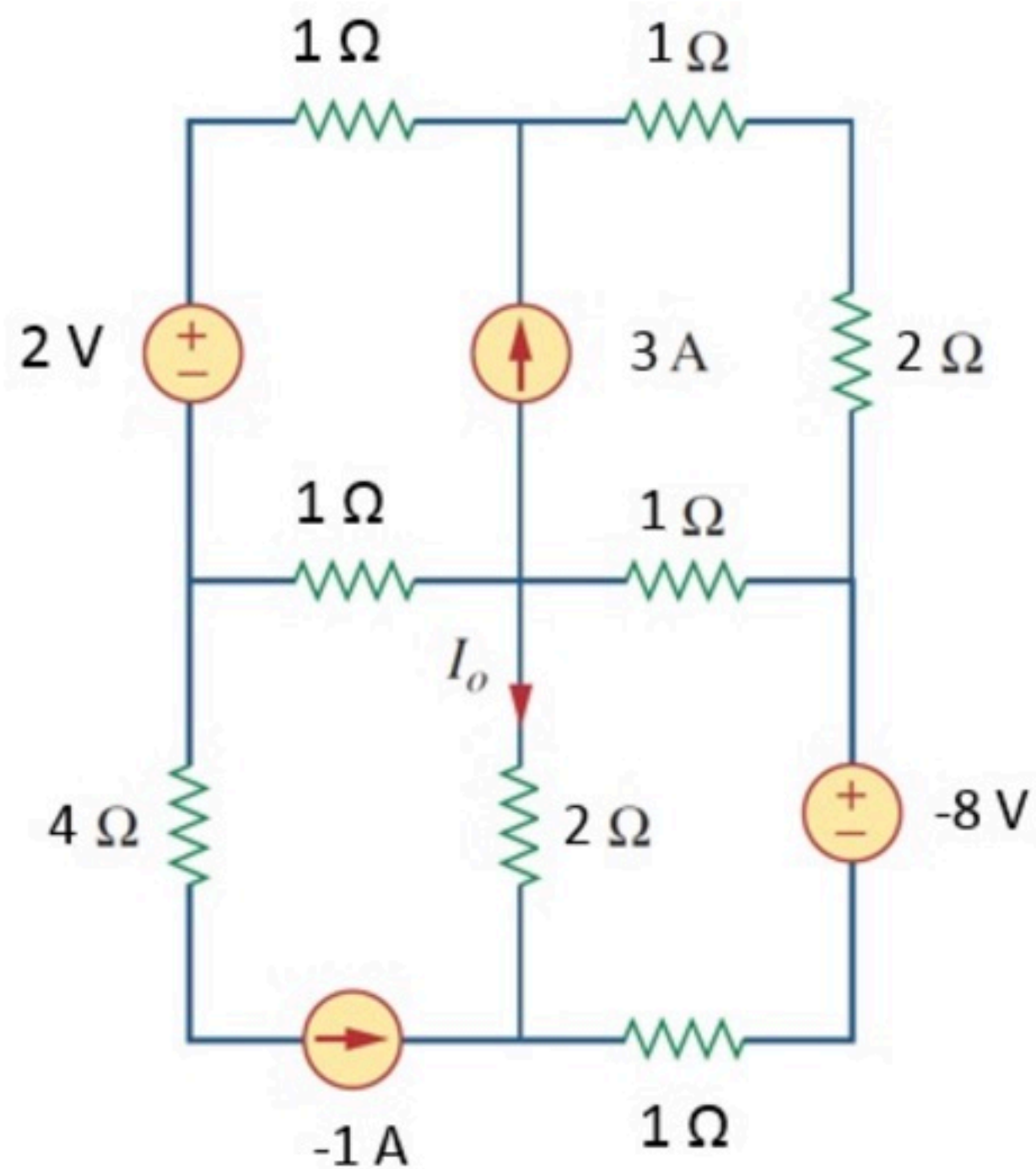
Hint: Ignore v_o at the start. Just find the two mesh currents.

PP Nodal Mesh 013

Unlimited Attempts.

Find the current I_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

I_o (A) :

-2

Hint: Use a supermesh

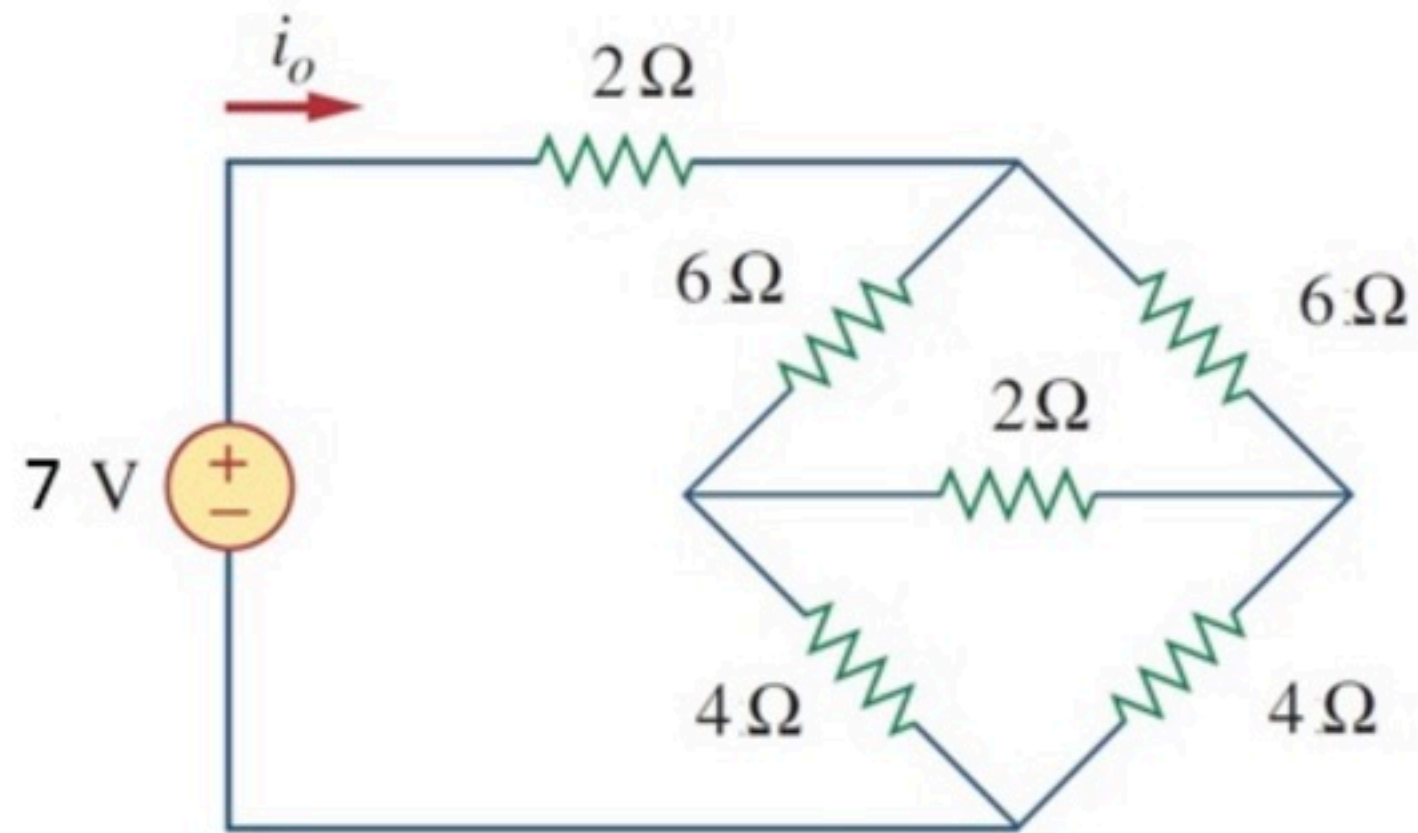


PP Nodal Mesh 014

Unlimited Attempts.

Find the current i_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

i_o (A) :

1



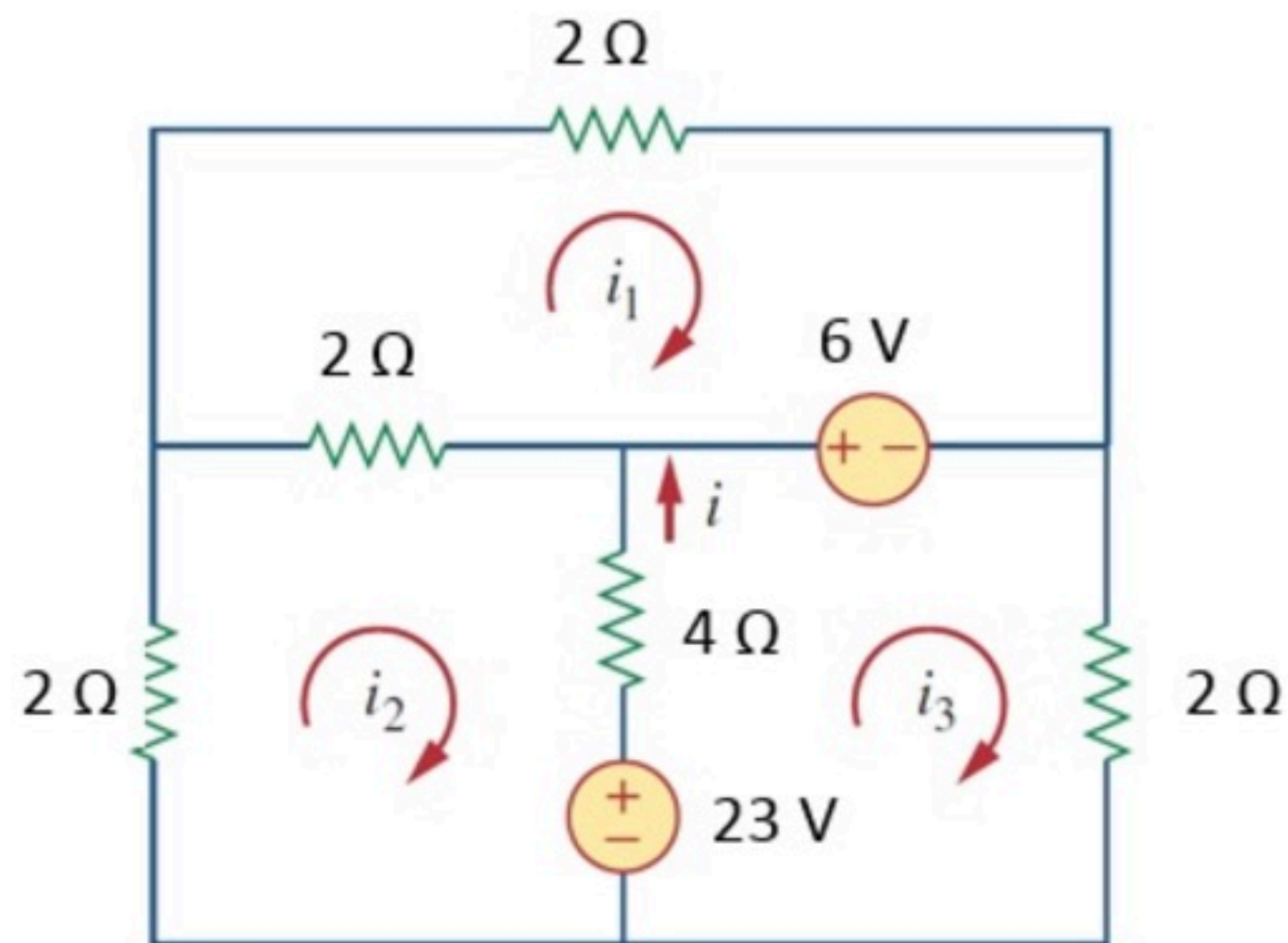
Hint: Symmetry will result in easier equations

PP Nodal Mesh 015

Unlimited Attempts.

Find the current i . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

$\therefore \dots$

Calculate the following:

i (A) :

3.5



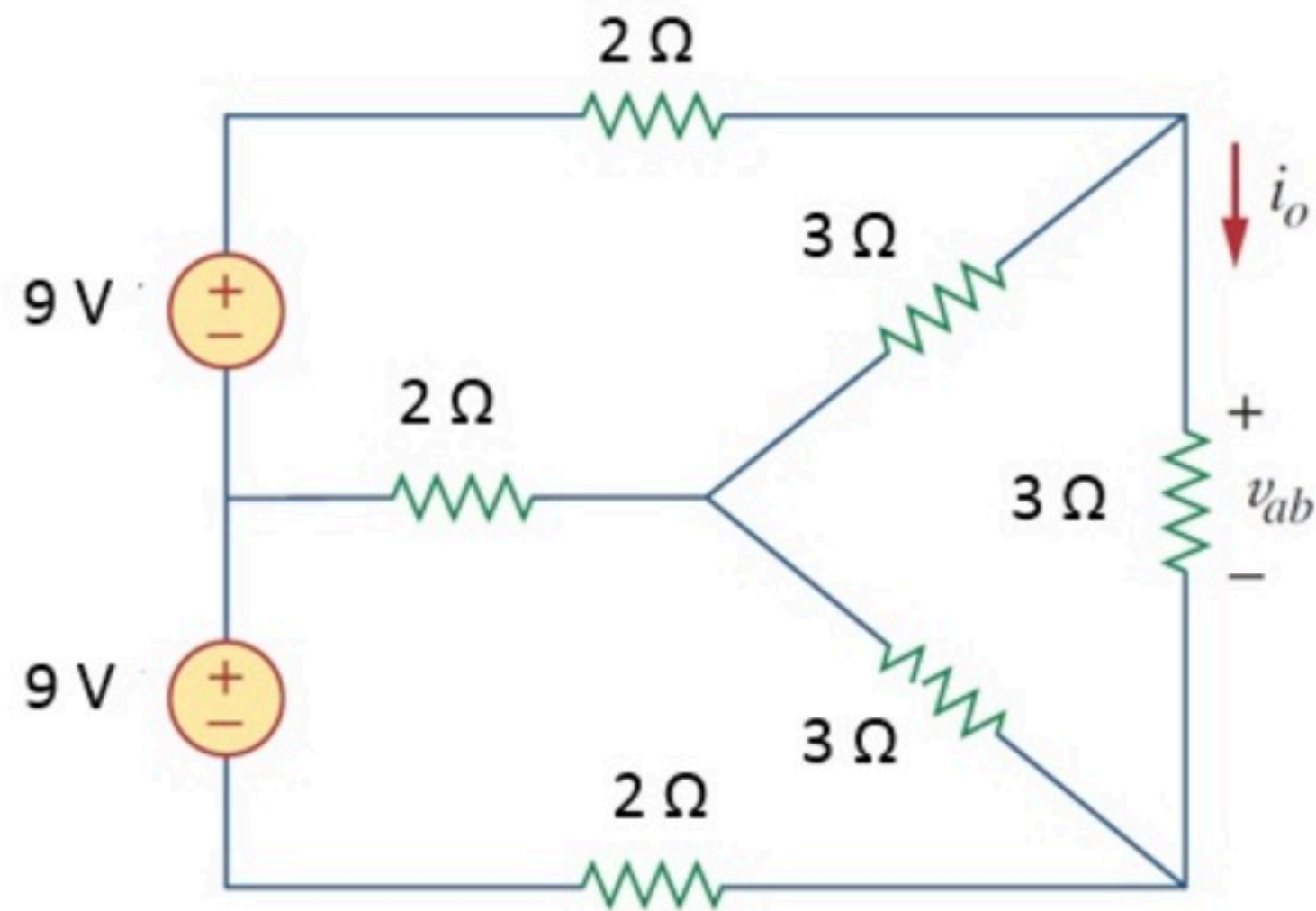
Hint: Mind the direction of the sources

PP Nodal Mesh 016

Unlimited Attempts.

Find the current i_o and the voltage v_{ab} . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

. . .

Calculate the following:

i_o (A) :

2



v_{ab} (V) :

6



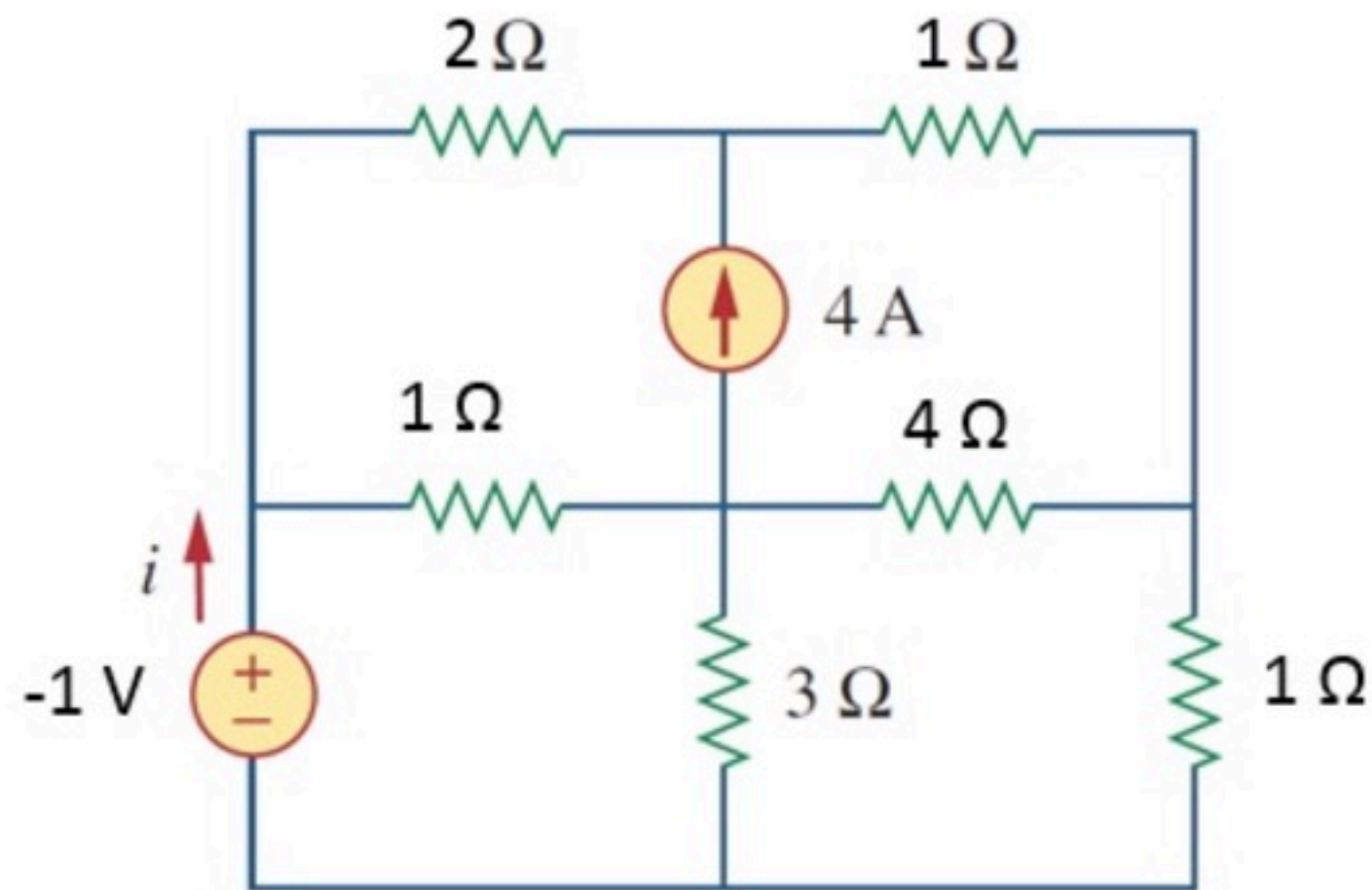
Hint: Afterward, check the symmetry

PP Nodal Mesh 017

Unlimited Attempts.

Find the current i . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

i (A) :

0



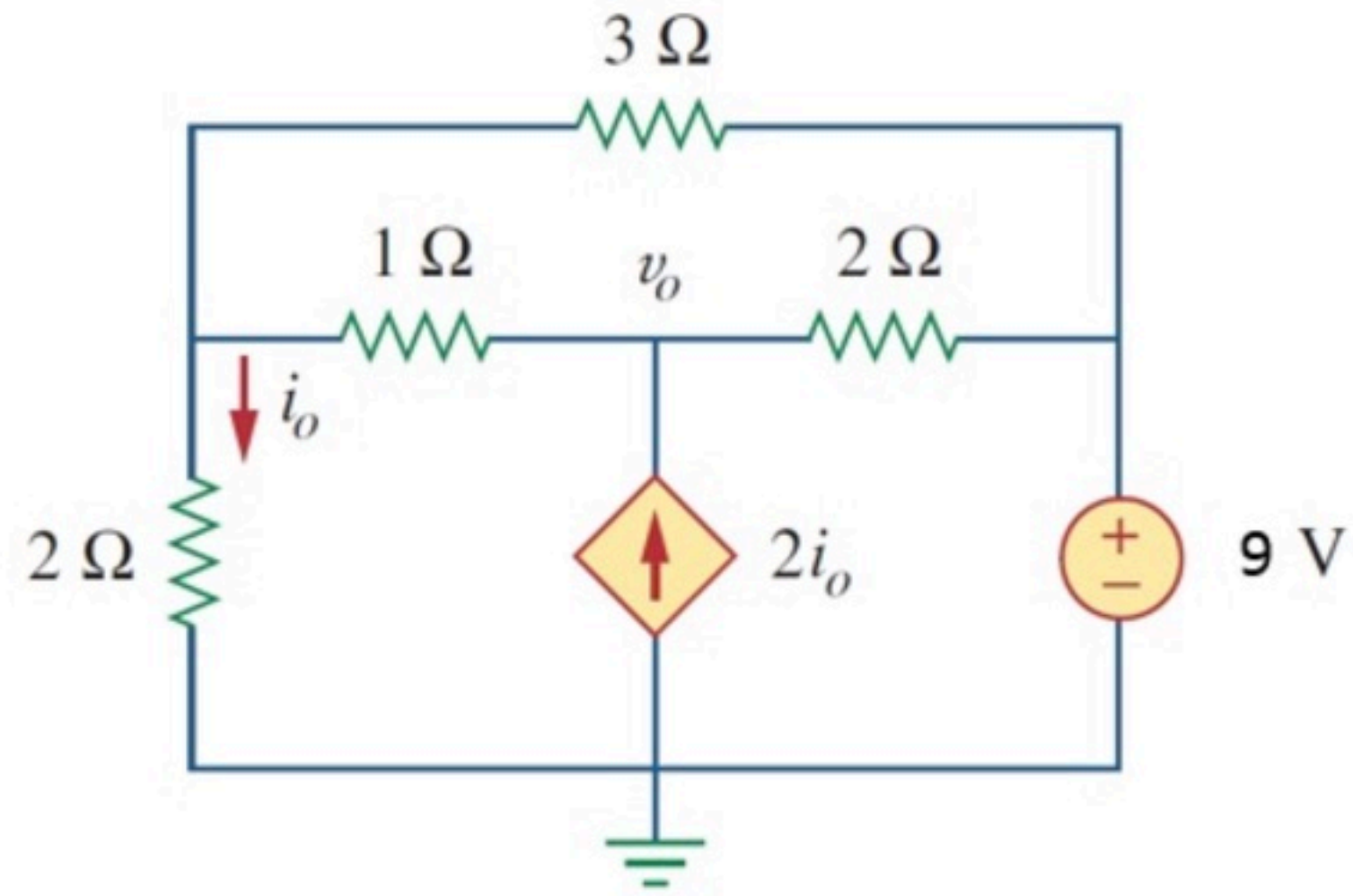
Hint: Use a supermesh

PP Nodal Mesh 018

Unlimited Attempts.

Find the current i_o and the voltage v_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

i_o (A) :

6



v_o (V) :

19



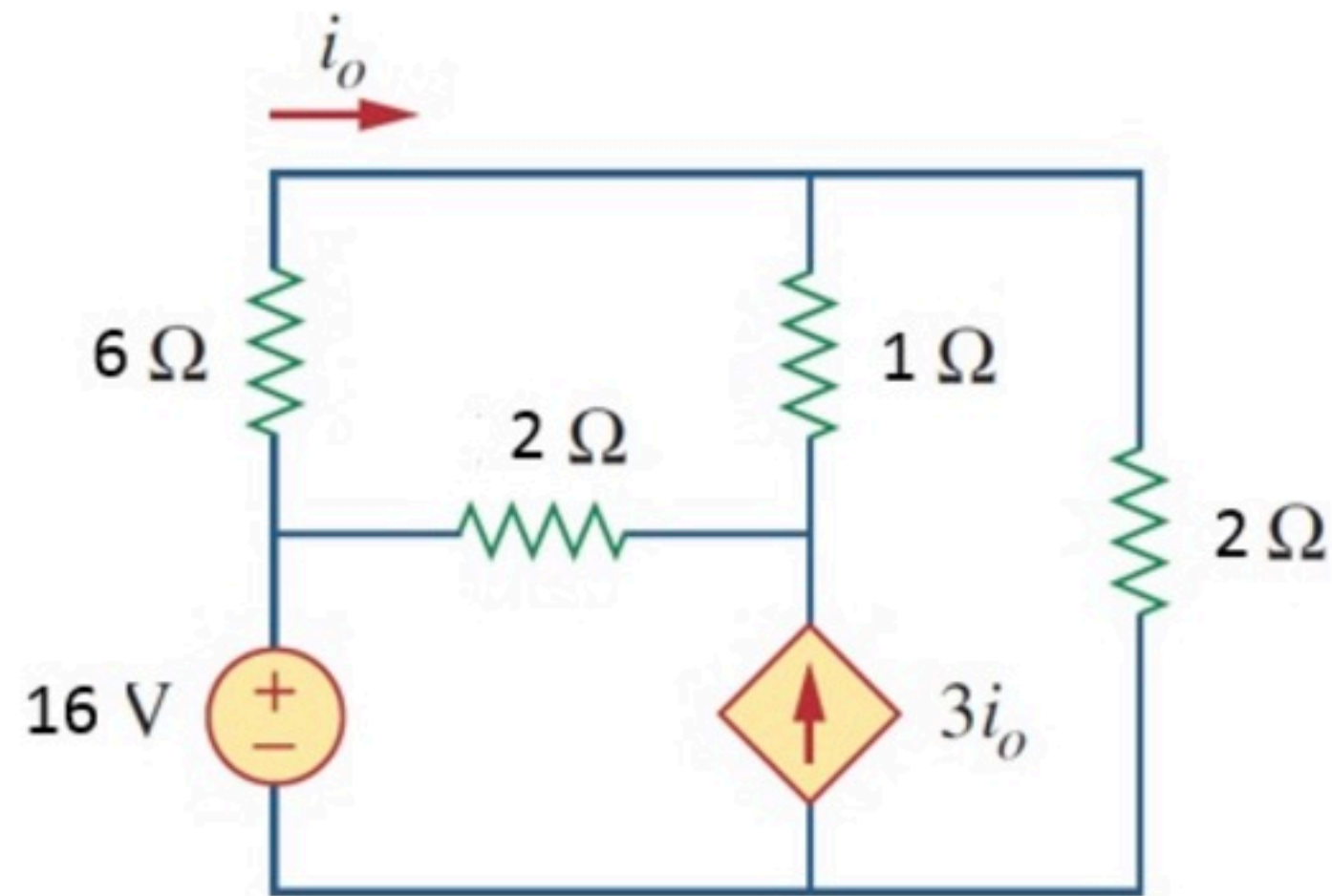
Hint: Use a supermesh

PP Nodal Mesh 019

Unlimited Attempts.

Find the current i_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

i_o (A) :

1



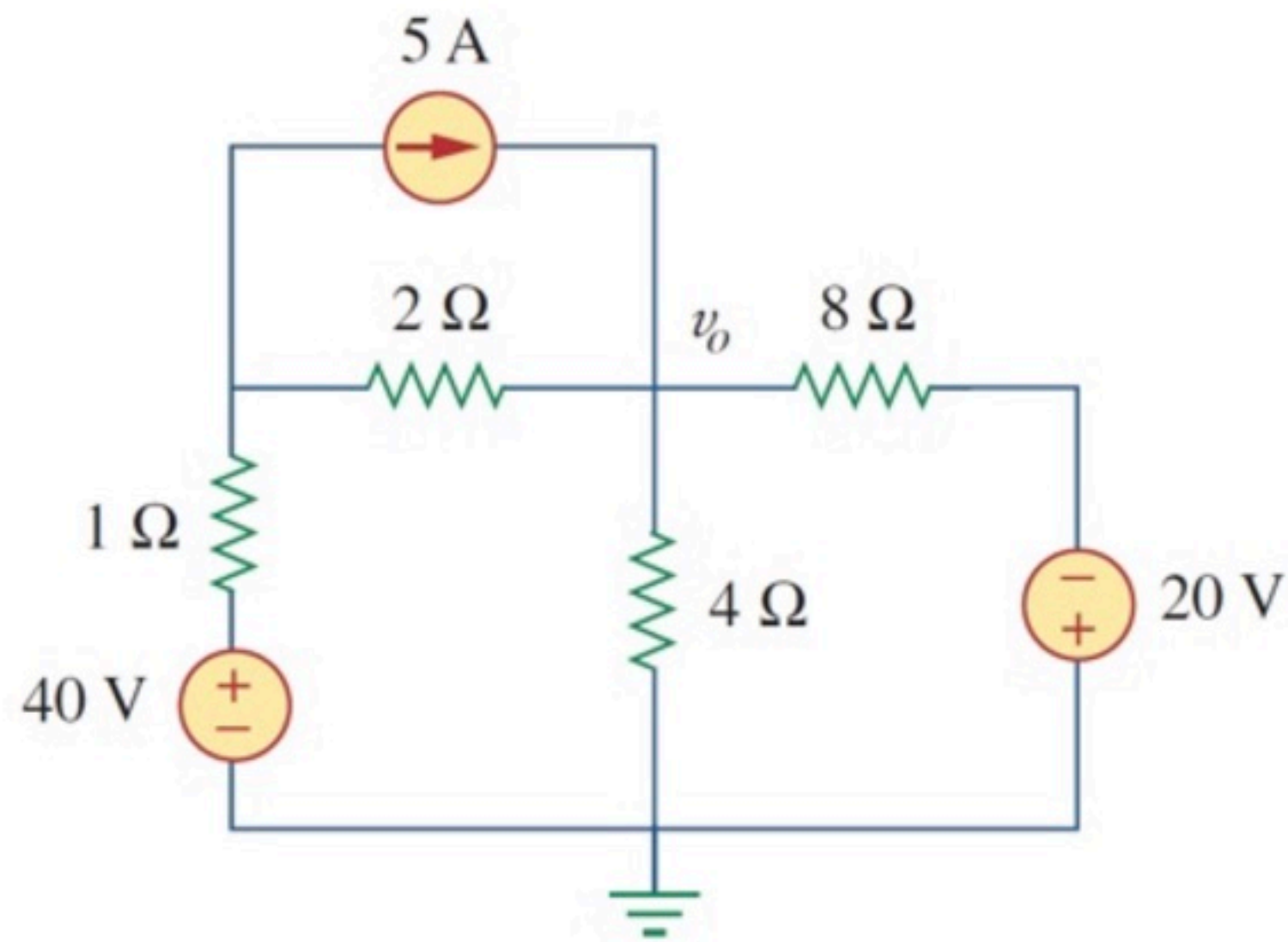
Hint: Use a supermesh

PP Nodal Mesh 020

Unlimited Attempts.

Find the voltage v_o . Solve using mesh analysis.

For extra practice: Afterwards solve again using nodal analysis.



Given Variables:

...

Calculate the following:

v_o (V) :

20



Hint: Can we find a mesh current directly?