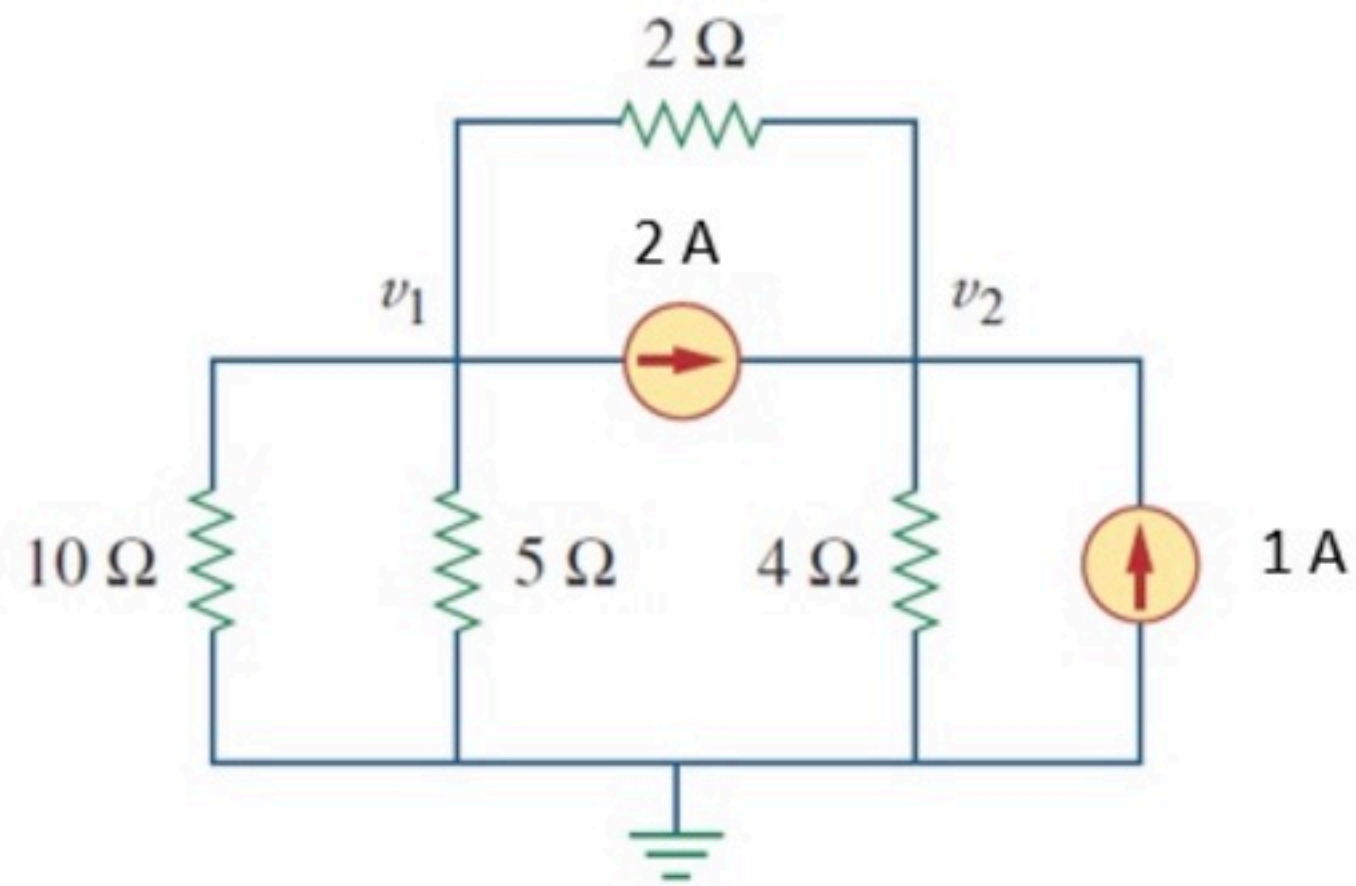


# PP - Nodal Mesh 001

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

✓

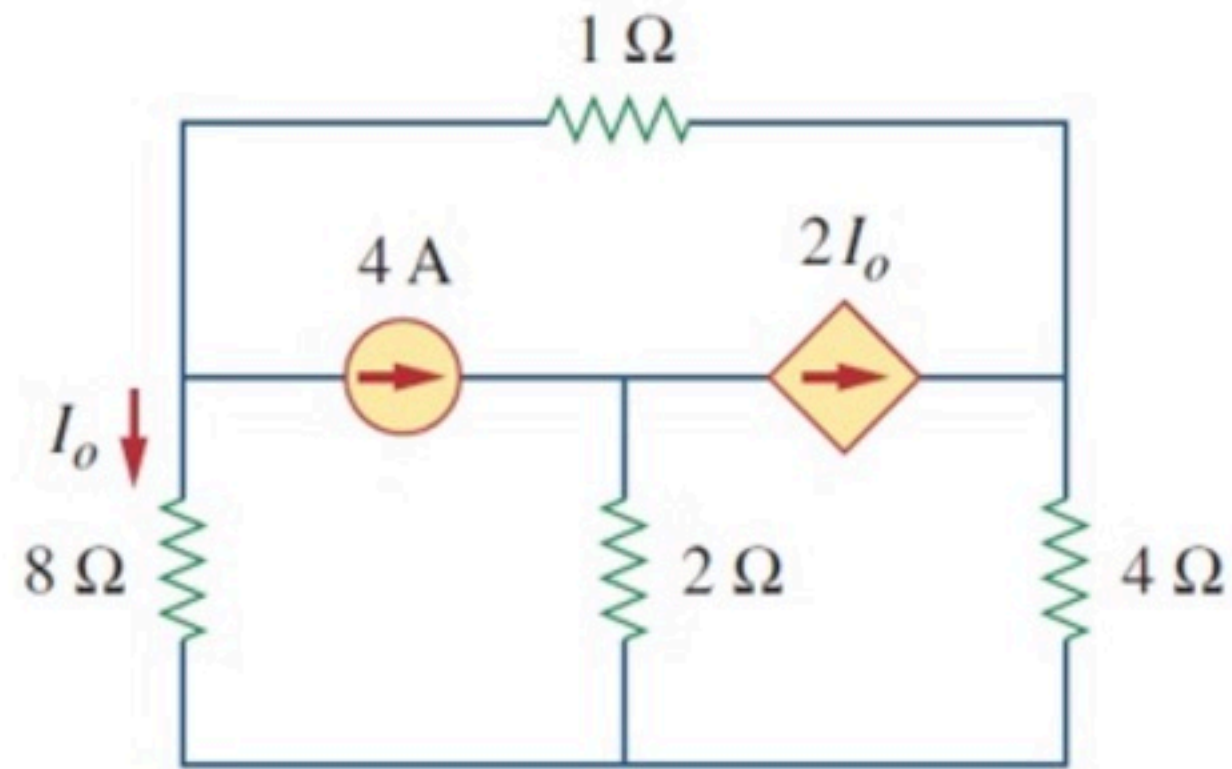
Hint: No supernodes

# 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



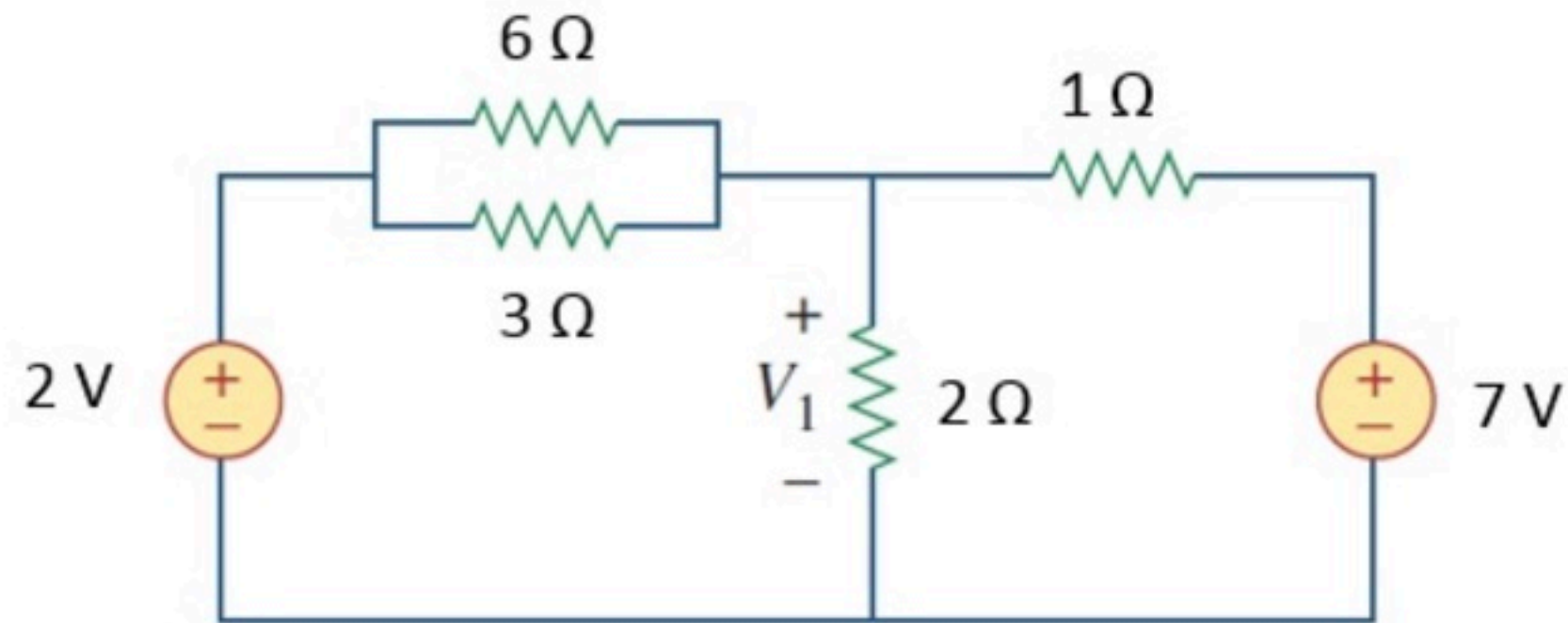
Hint: Write  $I_o$  as a function of the node voltages

# 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



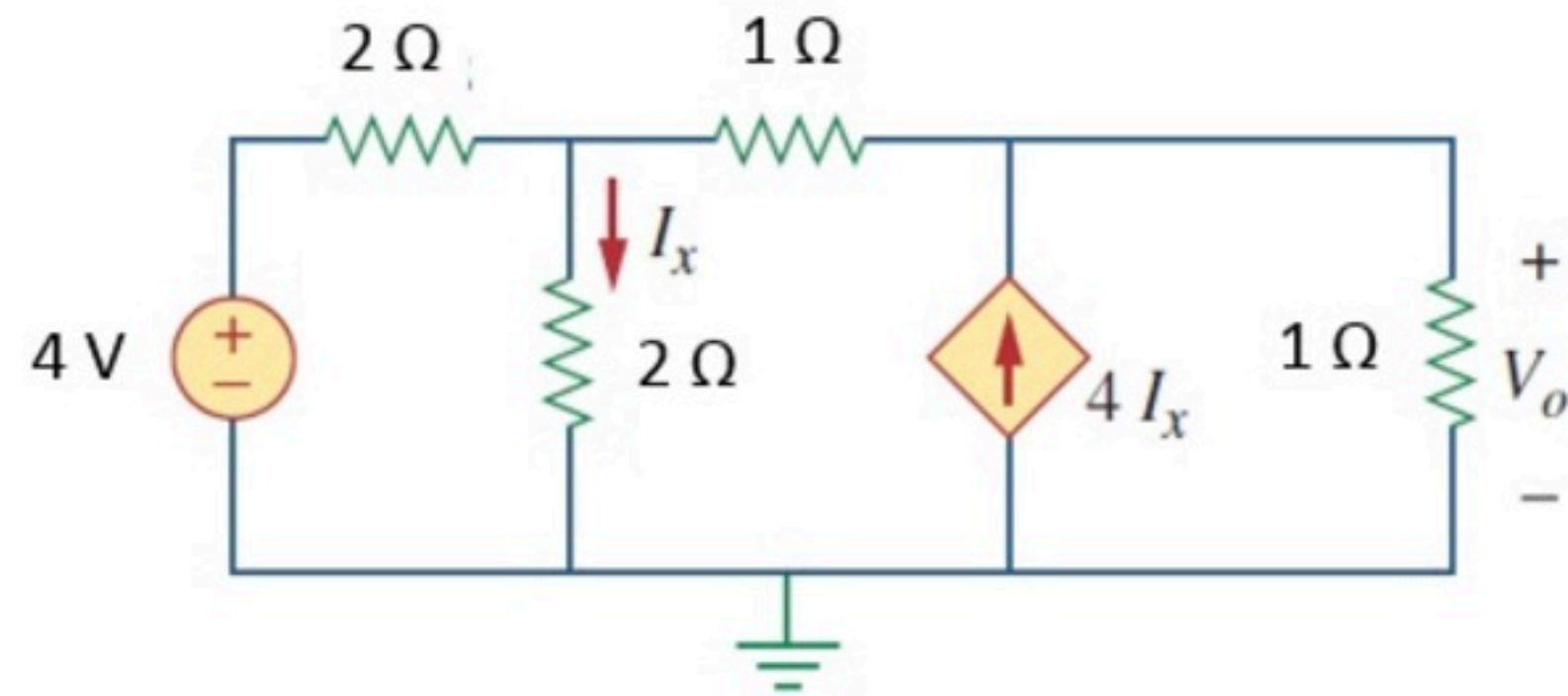
Hint: Choose GND strategically

# 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

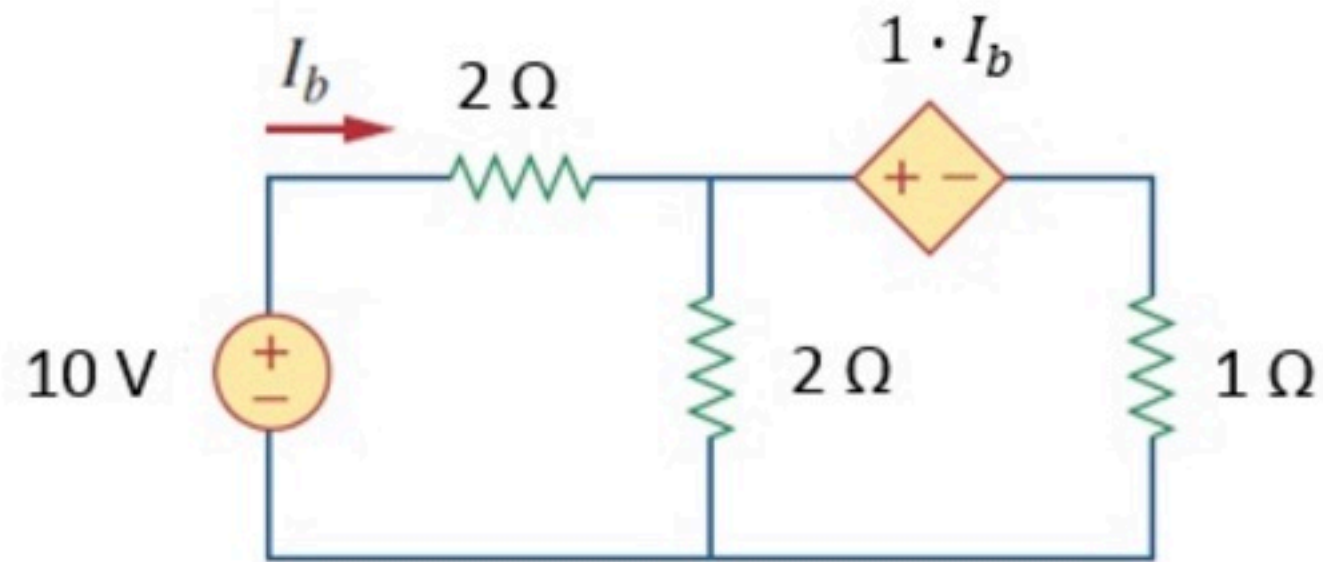


# PP - Nodal Mesh 005

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



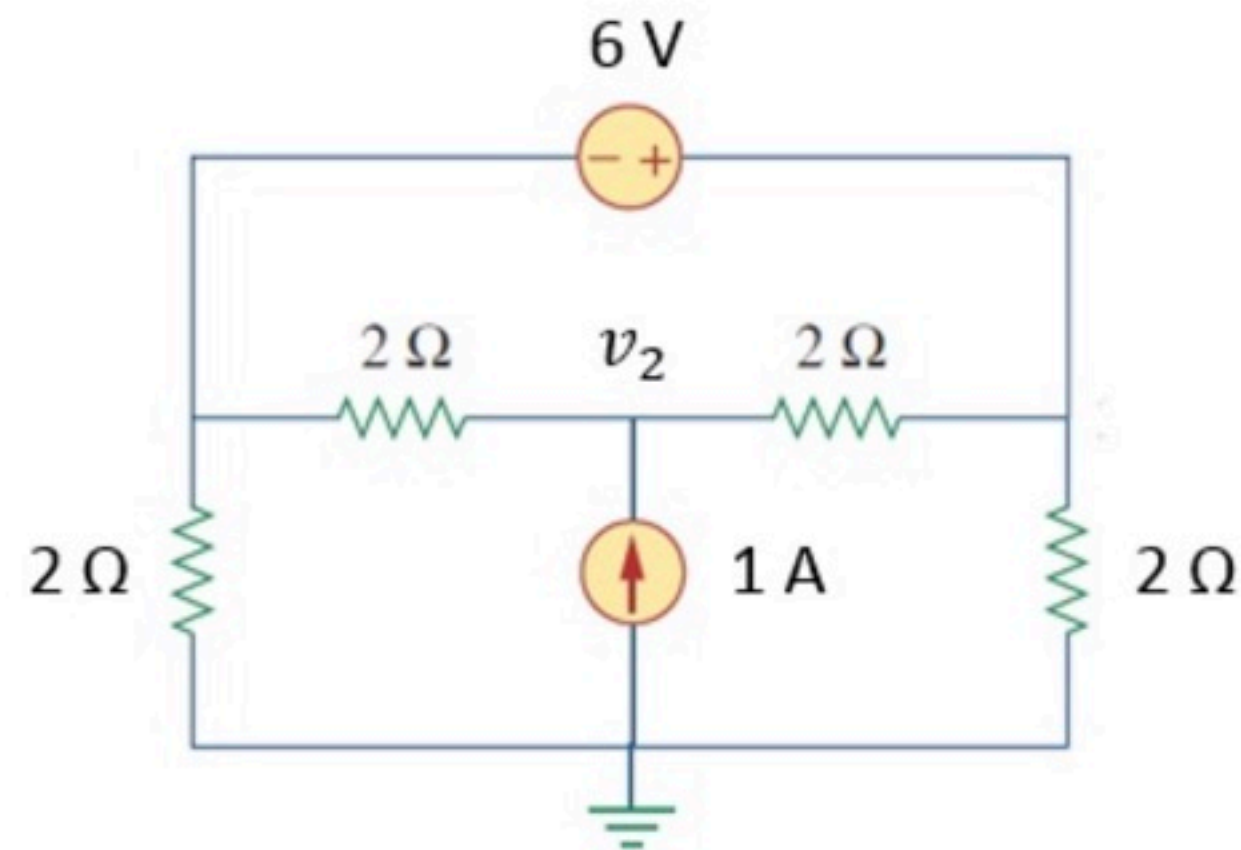
Hint: Need to use a supernode

# 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



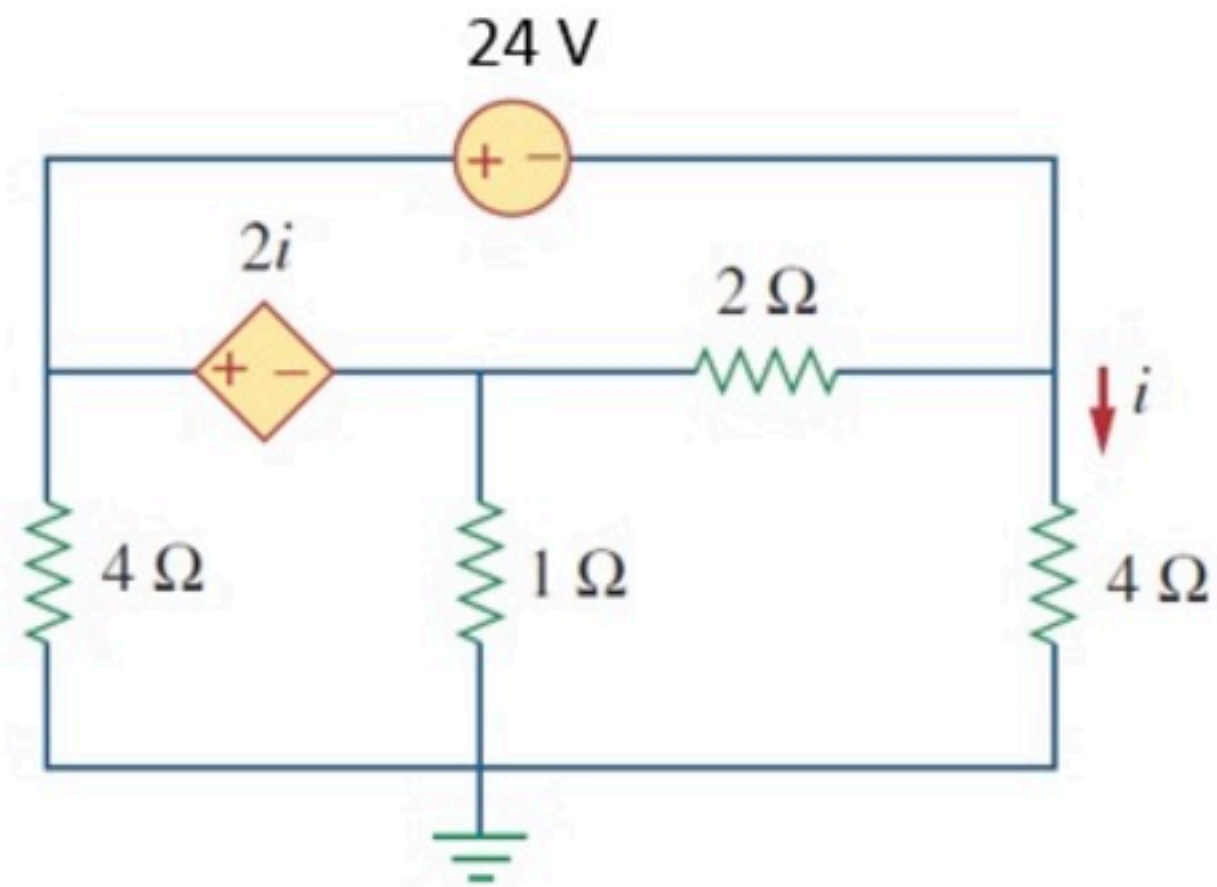
Hint: Use supernode or move GND

# 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

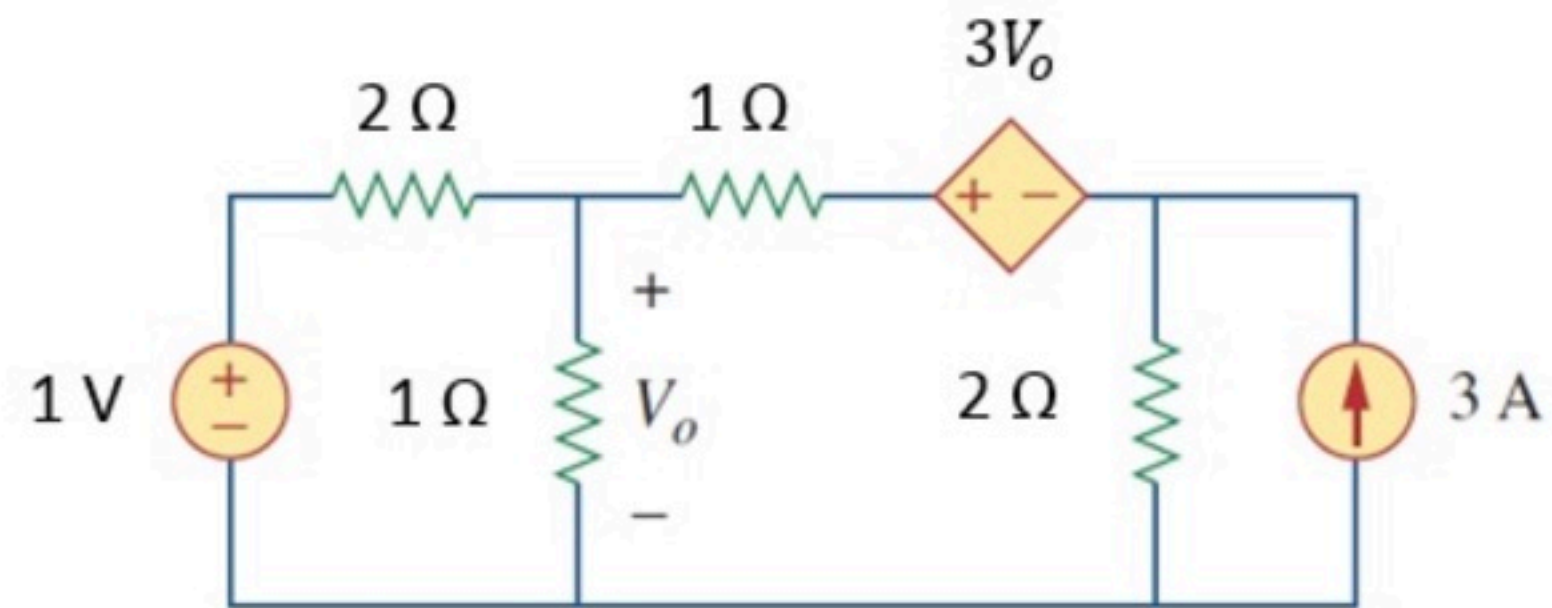


# PP - Nodal Mesh 008

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

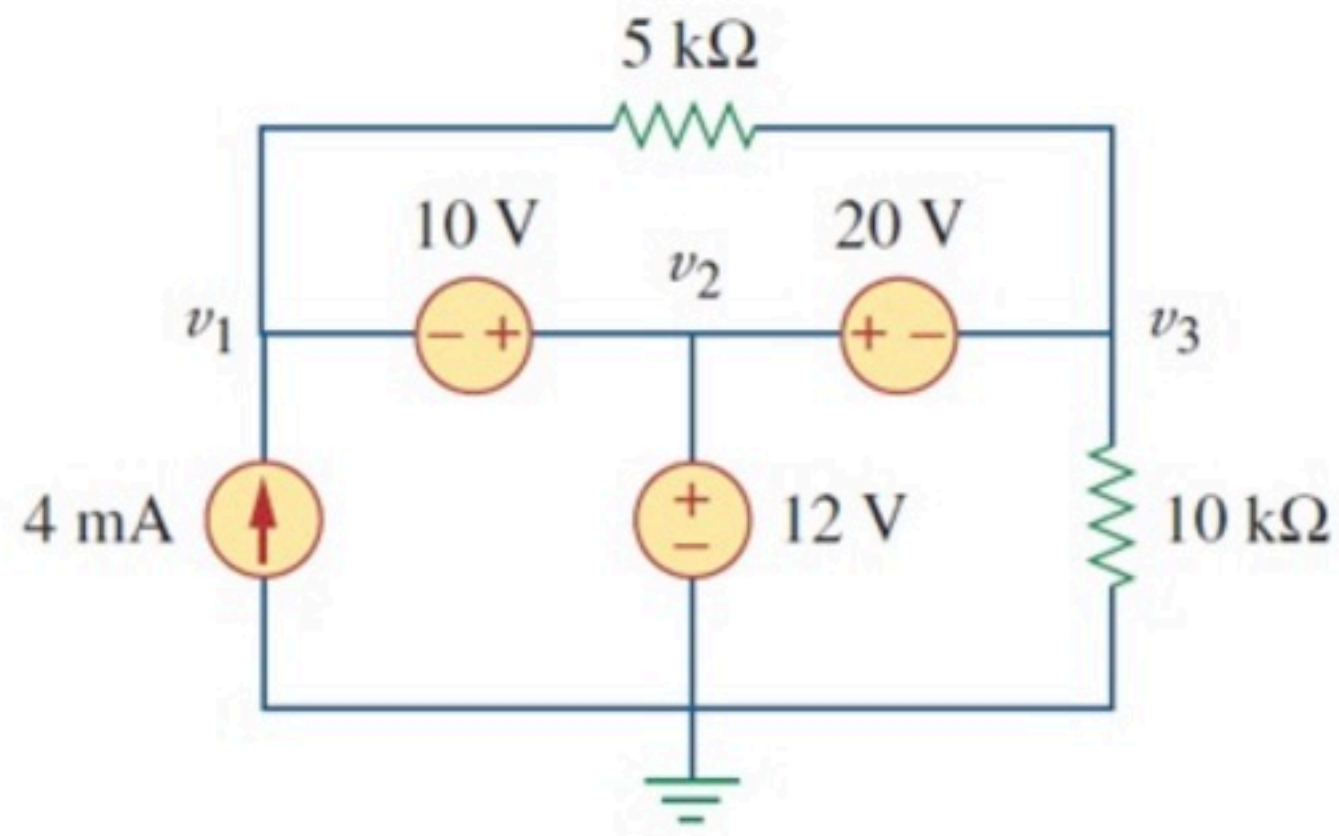


# PP - Nodal Mesh 009

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



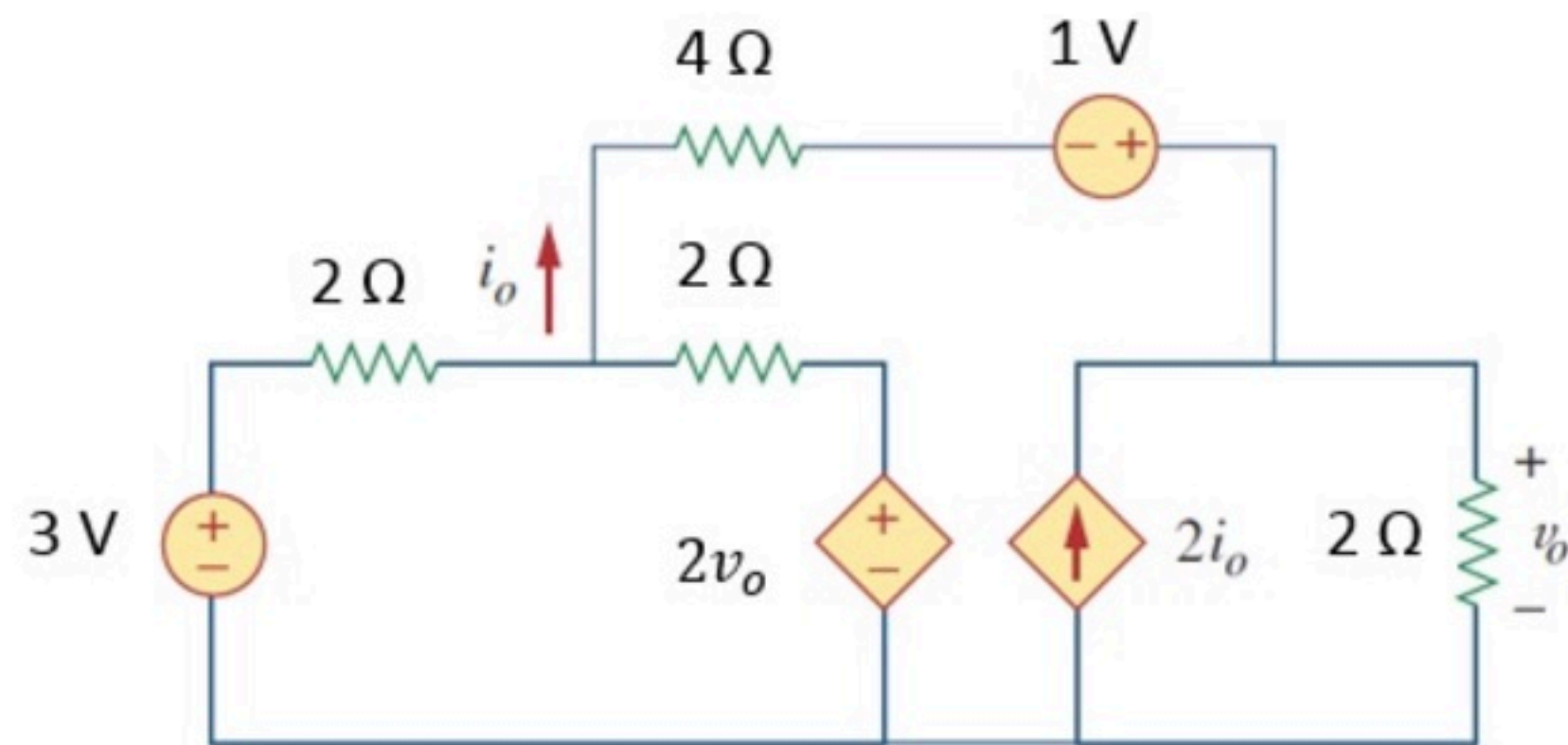
Hint: Check the V-sources

# 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