

**Started on** Sunday, 9 October 2016, 12:43 PM

**State** Finished

**Completed on** Sunday, 9 October 2016, 1:20 PM

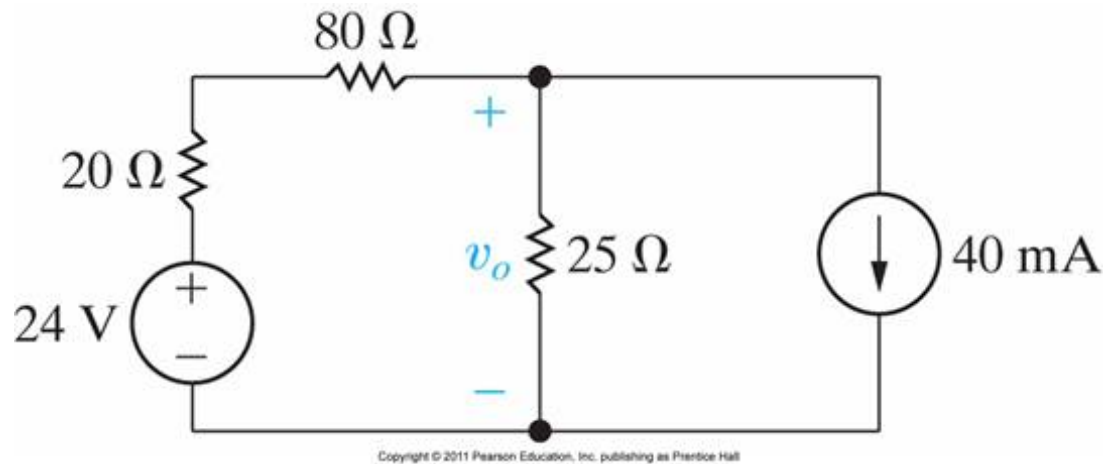
**Time taken** 36 mins 53 secs

**Grade** 90.00 out of 100.00

**Question 1**

Correct

Mark 10.00 out of 10.00



P4.09\_9ed

Use the node-voltage method to find  $v_o$  in this circuit.

$v_o =$    V

**Numeric Answers**

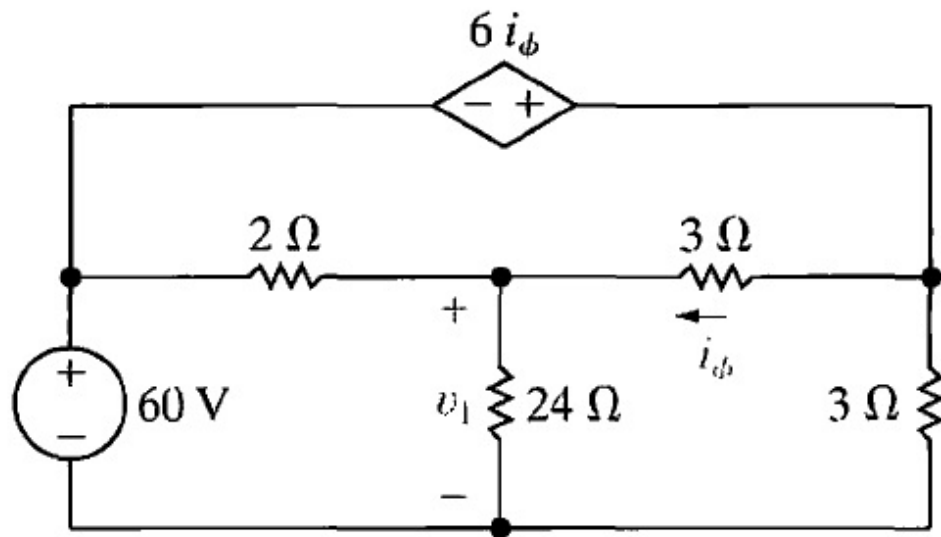
$v_o = 4$  V

**Correct**

Marks for this submission: 10.00/10.00.

**Question 2**

Correct

Mark 10.00 out of  
10.00

AP4.06\_9ed

Use the node-voltage method to find  $v_1$  in the circuit shown

$$v_1 = \boxed{48} \checkmark \text{ V}$$

**Numeric Answers**

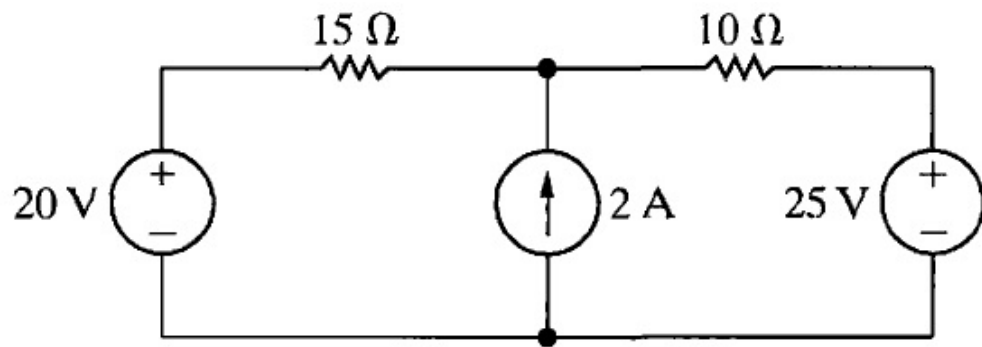
$$v_1 = 48 \text{ V}$$

**Correct**

Marks for this submission: 10.00/10.00.

**Question 3**

Correct

Mark 10.00 out of  
10.00

AP4.13\_9ed

Find the power absorbed/delivered by the 2 A current source in this circuit.

$$P_{2A} = \boxed{-70} \checkmark \text{ W}$$

“+” = absorbed and “-” = delivered

**Numeric Answer**

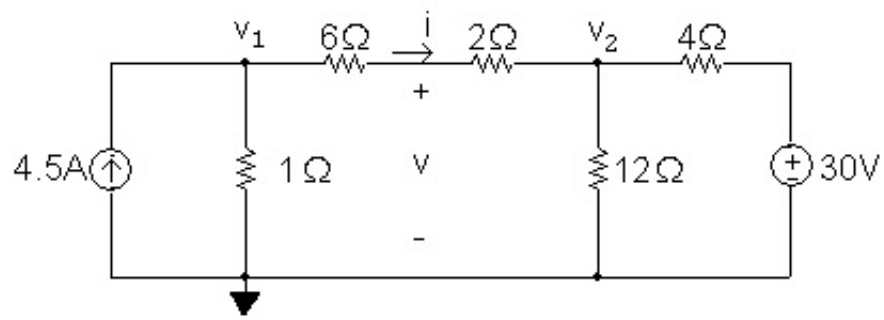
$$P_{2A} = -70 \text{ W}$$

**Correct**

Marks for this submission: 10.00/10.00.

**Question 4**

Correct

Mark 10.00 out of  
10.00

AP4.02\_9ed

Use the node-voltage method to find  $v$  in the circuit shown

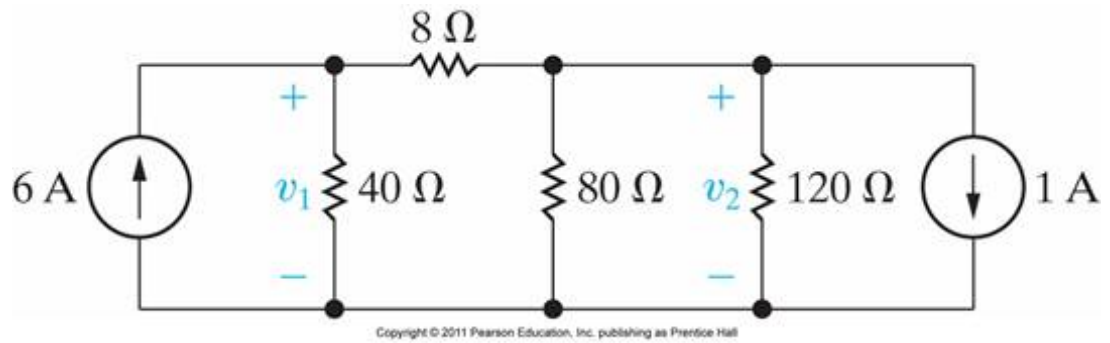
$$v = 15 \text{ V}$$

**Numeric Answers** $v = 15 \text{ V}$ **Correct**

Marks for this submission: 10.00/10.00.

**Question 5**

Correct

Mark 10.00 out of  
10.00

P4.08\_9ed

Use the node-voltage method to find  $v_1$  and  $v_2$  in this circuit.

$$v_1 = \boxed{120} \text{ V}$$

$$v_2 = \boxed{96} \text{ V}$$

**Numeric Answers**

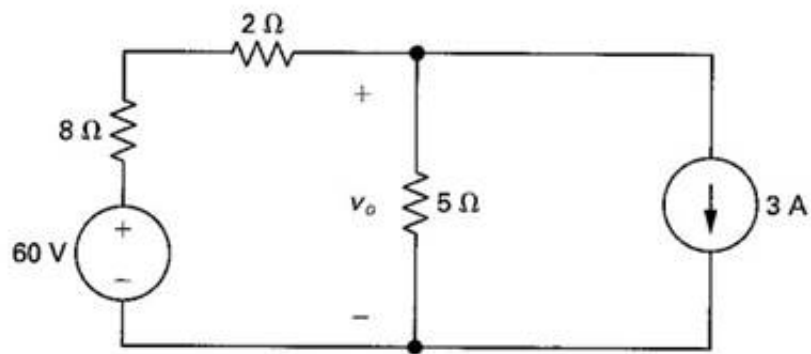
$$v_1 = 120 \text{ V} \quad v_2 = 96 \text{ V}$$

**Correct**

Marks for this submission: 10.00/10.00.

**Question 6**

Correct

Mark 10.00 out of  
10.00

P4.05\_6ed

Use the node-voltage method.

a) Find  $v_o$  in this circuit.

$$v_o = 10 \text{ V}$$

b) Find the power absorbed/delivered by the 3A current source.

$$P_{3A} = 30 \text{ W}$$

**Numeric Answer**

a)  $v_o = 10 \text{ V}$

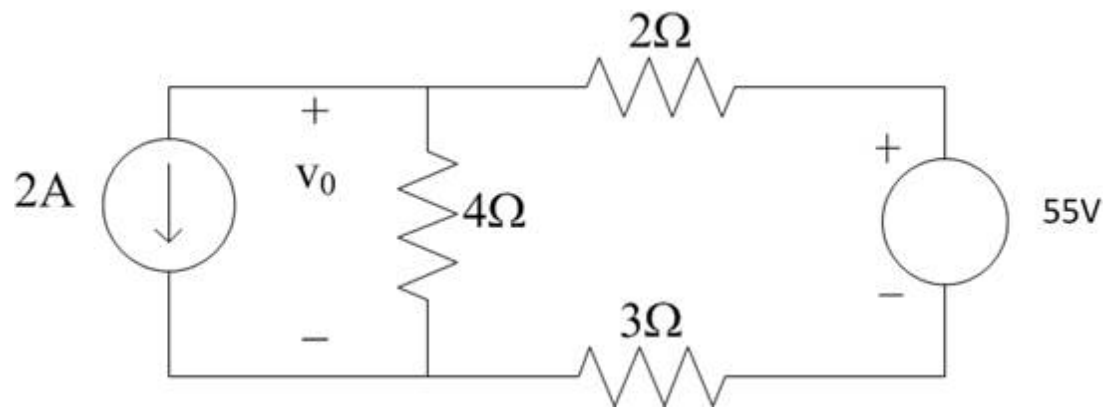
b)  $P_{3A} = 30 \text{ Watts}$

**Correct**

Marks for this submission: 10.00/10.00.

**Question 7**

Incorrect

Mark 0.00 out of  
10.00

P4.02\_6ed

Use the node-voltage method.

a) Find the voltage  $v_0$  across the 2A current source in this circuit.

$$v_0 = \boxed{2.67} \times \text{V}$$

b) Find the power absorbed/delivered by the 2A current source.

$$P_{2A} = \boxed{20} \times \text{W}$$

**Numeric Answer**

a)  $v_0 = 20 \text{ V}$

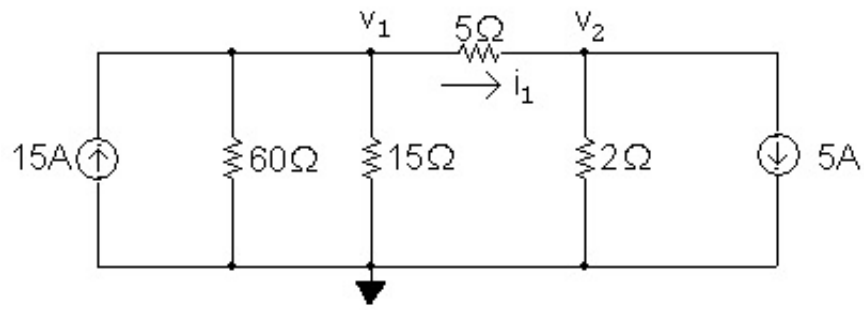
b)  $P_{2A} = 40 \text{ Watts}$

**Incorrect**

Marks for this submission: 0.00/10.00.

**Question 8**

Correct

Mark 10.00 out of  
10.00

AP4.01\_9ed

For this circuit, use the node-voltage method to find  $v_1$ ,  $v_2$ , and  $i_1$ .

$$v_1 = \boxed{60} \checkmark \text{ V}$$

$$v_2 = \boxed{10} \checkmark \text{ V}$$

$$i_1 = \boxed{10} \checkmark \text{ A}$$

**Numeric Answers**

$$v_1 = 60 \text{ V}$$

$$v_2 = 10 \text{ V}$$

$$i_1 = 10 \text{ A}$$

**Correct**

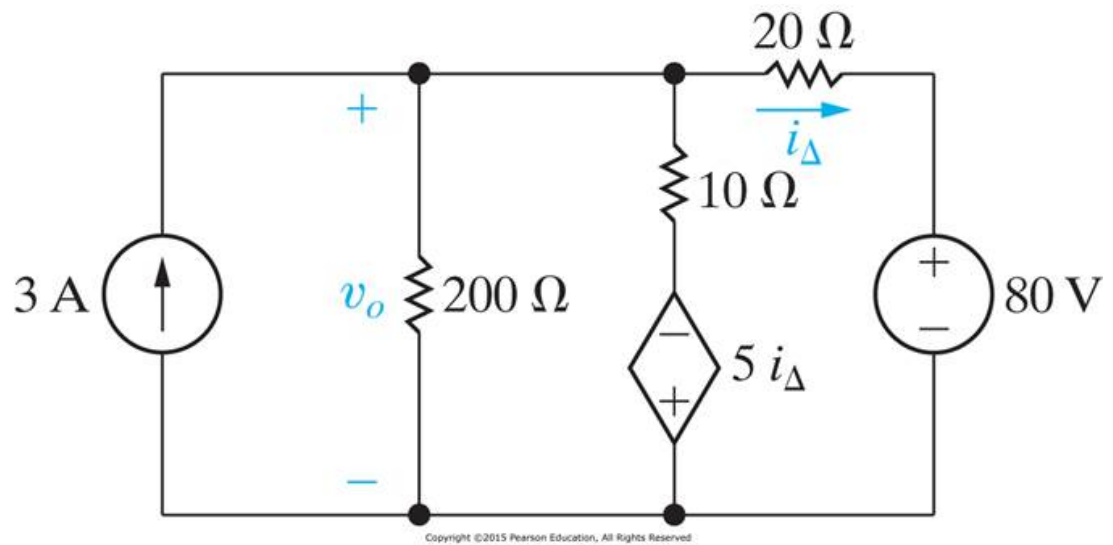
Marks for this submission: 10.00/10.00.



**Question 9**

Correct

Mark 10.00 out of 10.00



P4.17\_10ed

a) Use the node-voltage method to find  $v_o$  in the circuit shown

$$v_o = 50 \text{ V}$$

b) Find the power absorbed/delivered by the dependent source  $P_{ds}$ .

$$P_{ds} = 31.875 \text{ W}$$

c) Find the power absorbed/delivered by the independent sources.

$$P_{3A} = -150 \text{ W}$$

$$P_{80V} = -120 \text{ W}$$

**Numeric Answers**

a)  $v_o = 50 \text{ V}$

b)  $P_{ds} = 31.875 \text{ W}$  absorbing

c)  $P_{3A} = -150 \text{ W}$  delivering     $P_{80V} = -120 \text{ W}$  delivering

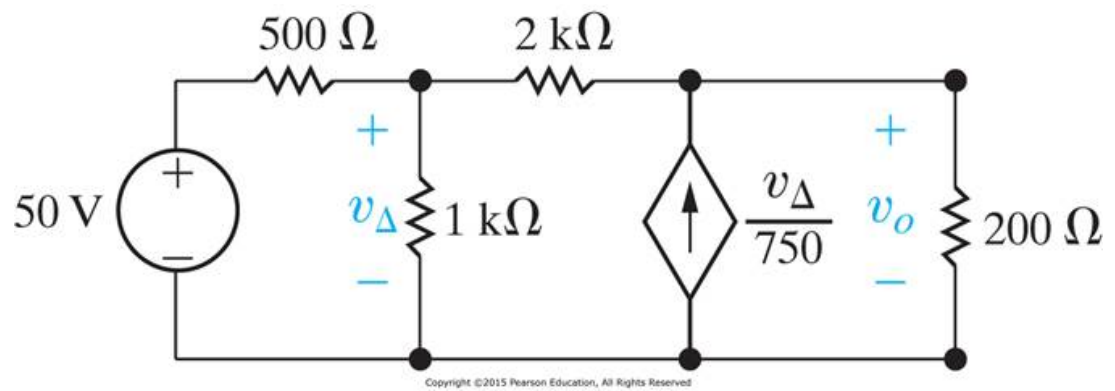
**Correct**

Marks for this submission: 10.00/10.00.

**Question 10**

Correct

Mark 10.00 out of 10.00



P4.20\_10ed

a) Use the node-voltage method to find  $v_o$  in the circuit shown

$$v_o = 10 \text{ V}$$

b) Find the power absorbed/delivered by the dependent source.

$$P_{ds} = -0.4 \text{ W}$$

**Numeric Answers**

a)  $v_o = 10 \text{ V}$

b)  $P_{ds} = -0.4 \text{ W}$  delivering

**Correct**

Marks for this submission: 10.00/10.00.