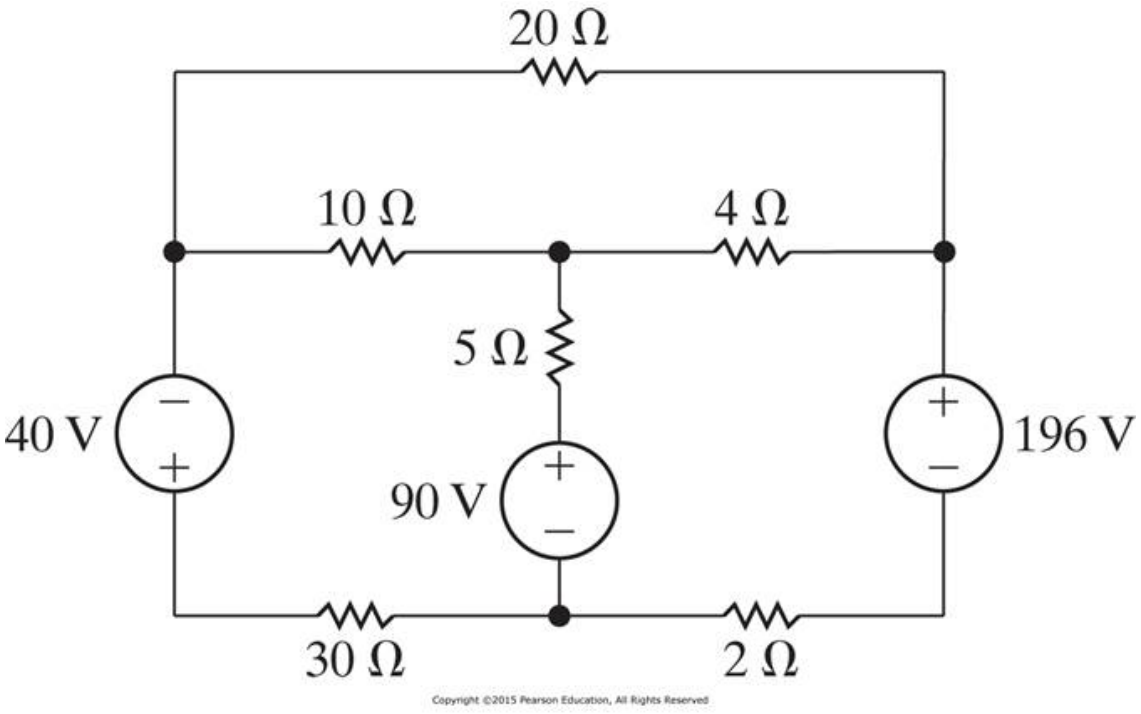
Started on	Monday, 10 October 2016, 11:58 AM
State	Finished
Completed on	Sunday, 16 October 2016, 4:39 PM
Time taken	6 days 4 hours
Grade	**70.00** out of 100.00

Question 1

Correct

Mark 10.00 out of 10.00



P4.36_10ed

Use the mesh-current method.

Find the current through the 196V source.

I_{196V} = -13 ✓ A

Numeric Answer

I_{96V} = -13 A

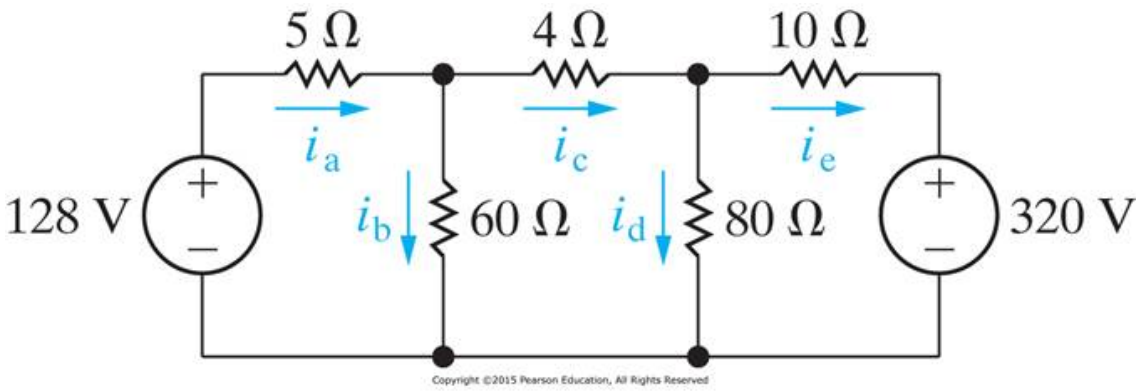
Correct

Marks for this submission: 10.00/10.00.

Question 2

Incorrect

Mark 0.00 out of 10.00



P4.33_10ed

Use the mesh-current method.

Find the power absorbed/delivered by the 60Ω (Ohm), and the 80Ω (Ohm) resistors.

$P_{60\Omega}$ = 3.2 ✗ W

$P_{80\Omega}$ = 2.4 ✗ W

Numeric Answers

P_{60W} = 437.4 W
P_{80W} = 500 W

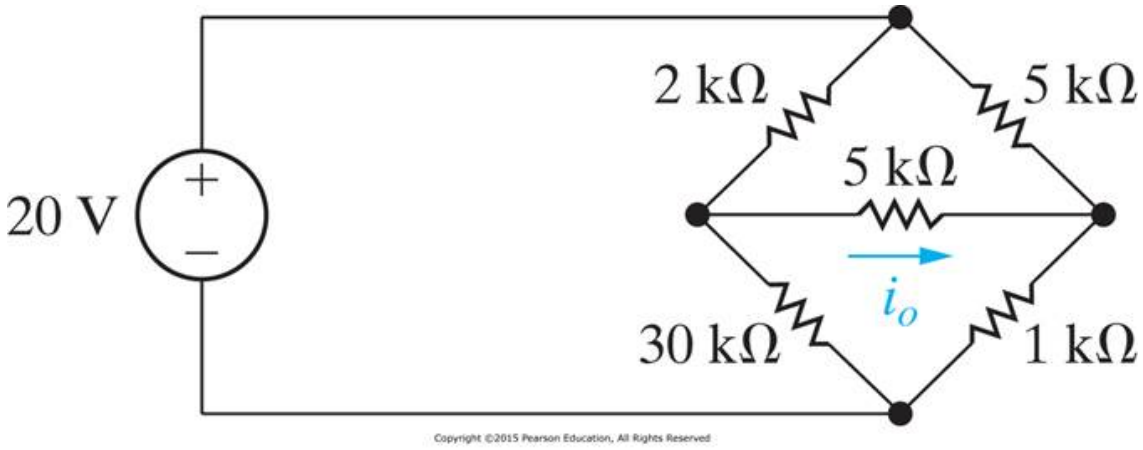
Incorrect

Marks for this submission: 0.00/10.00.

Question 3

Correct

Mark 10.00 out of 10.00



P4.35_10ed

Use the mesh-current method.

Find the current i0 in the circuit.

i_0 = 2 ✓ mA (milli Amps)

Numeric Answers

i_0 = 2 mA

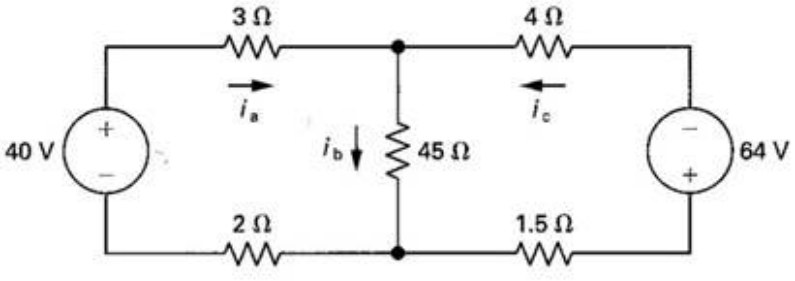
Correct

Marks for this submission: 10.00/10.00.

Question 4

Incorrect

Mark 0.00 out of 10.00



P4.30_6ed

Use the mesh-current method.

Find the currents ia, ib and ic.

i_a = 13.33 ✗ A

i_b = -3 ✗ A

i_c = 16 ✗ A

Numeric Answer

i_a = 9.80 A
i_b = -0.2 A
i_c = -10 A

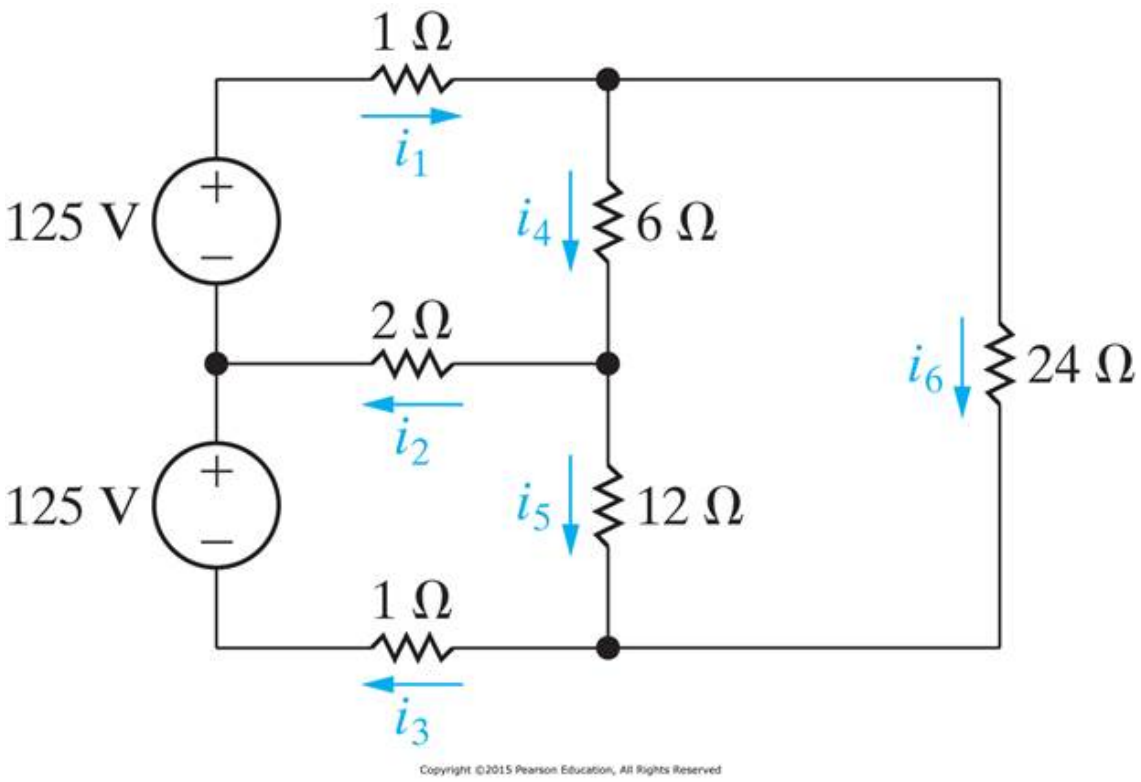
Incorrect

Marks for this submission: 0.00/10.00.

Question 5

Correct

Mark 10.00 out of 10.00



P4.34_10ed

Use the mesh-current method.

Find the power absorbed/delivered by the 24Ω (Ohm) resistor.

$P_{24\Omega}$ = 1799.24 ✓ W

Numeric Answers

P_{24W} = 1,799.479 W absorbing

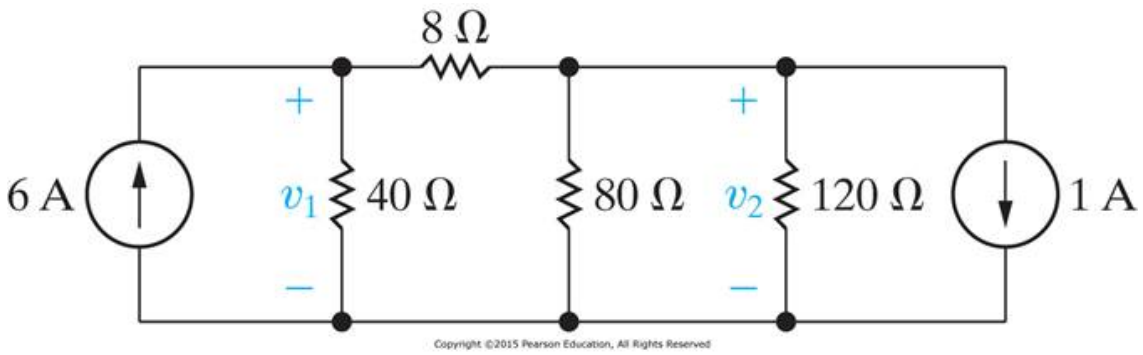
Correct

Marks for this submission: 10.00/10.00.

Question 6

Correct

Mark 10.00 out of 10.00



P4.44_10ed

Find the voltages v_1 and v_2.

v_1 = 120 ✓ V v_2 = 96 ✓ V

Numeric Answers

v_1 = 120 V

v_2 = 96 V

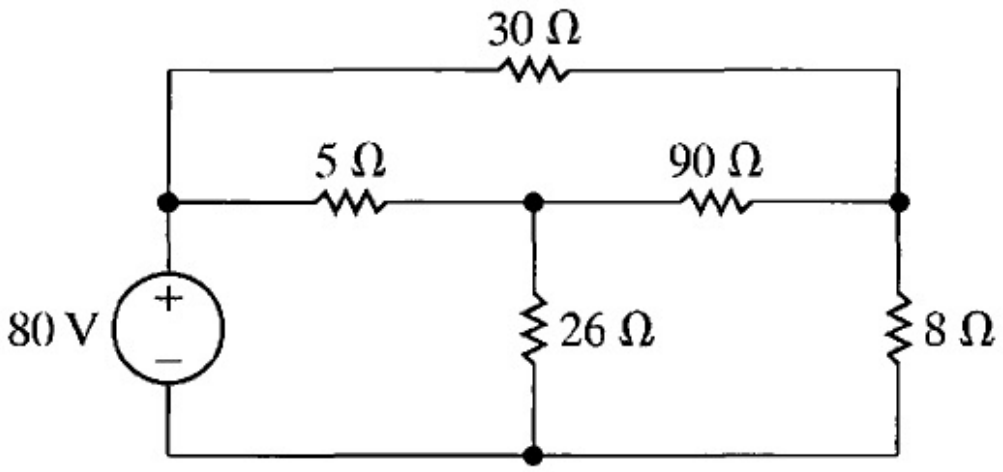
Correct

Marks for this submission: 10.00/10.00.

Question 7

Correct

Mark 10.00 out of 10.00



AP4.07_9ed

Use the mesh-current method.

a) Find the power absorbed/delivered by the 80 V source to the circuit shown.

P_{80V} = -400 ✓ W

b) Find the power absorbed/delivered in the 8 Ω resistor.

$P_{8\Omega}$ = 50 ✓ W

Numeric Answers

a) P_{80V} = -400 W
b) $P_{8\Omega}$ = 50 W

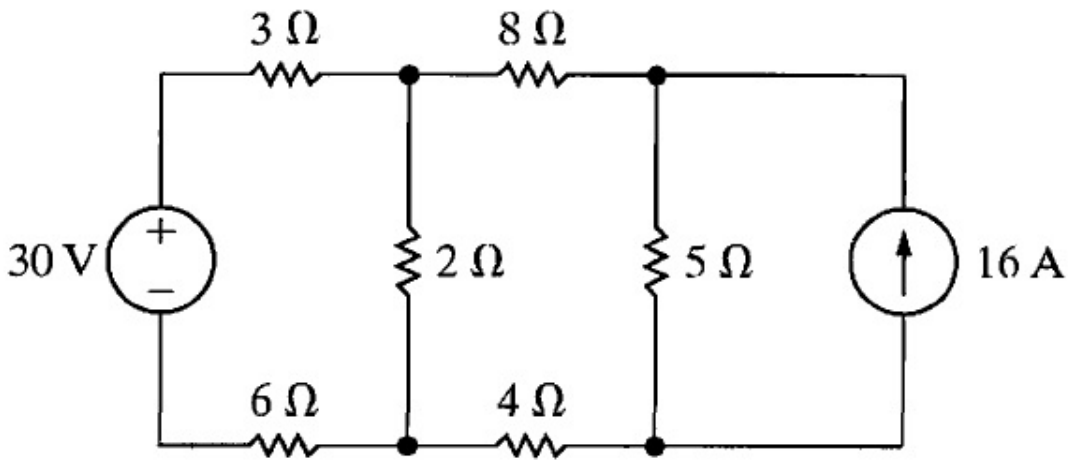
Correct

Marks for this submission: 10.00/10.00.

Question 8

Correct

Mark 10.00 out of 10.00



AP4.10_9ed

Use the mesh-current method to find the power dissipated in the 2 Ω (Ohm) resistor in the circuit shown

$P_{2\Omega}$ = 72 ✓ W

Numeric Answers

$P_{2\Omega}$ = 72 W

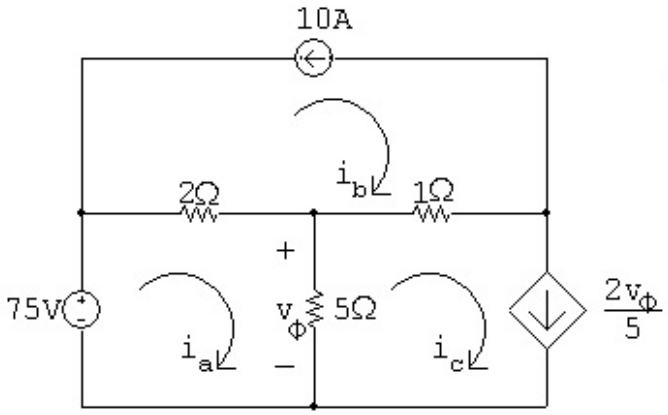
Correct

Marks for this submission: 10.00/10.00.

Question 9

Correct

Mark 10.00 out of 10.00



AP4.11_9ed

Use the mesh-current method to find the mesh current ia in the circuit shown

i_a = 15 ✓ A

Numeric Answer

i_a = 15 A

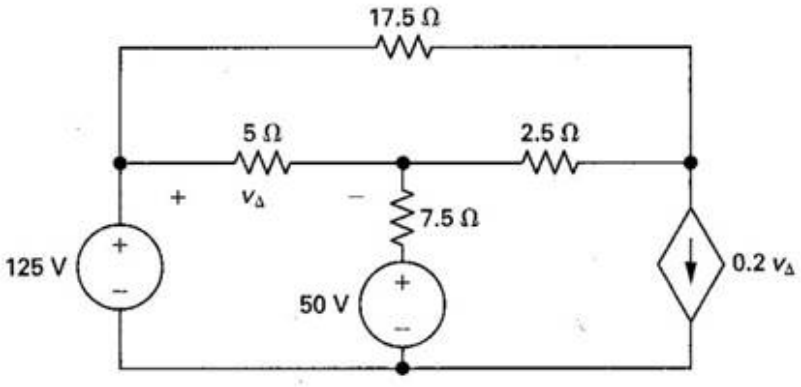
Correct

Marks for this submission: 10.00/10.00.

Question 10

Not answered

Mark 0.00 out of 10.00



P4.34_6ed

a) Find the current through the dependent current source 0.2 v_Δ.

$0.2\ v_\Delta =$ [ ] ✗ A

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

$P0.2V_\Delta =$ [ ] ✗ W

Numeric Answer

a) $0.2\ v_D = 9.6$ A

b) $P_{0.2VD} = 595.2$ W absorbed