Home ► Electrical Engineering ► Engr 17 F16 Tatro ► Homework ► Homework 3 - Chap 2 & 3

Started on Tuesday, 13 September 2016, 12:03 PM

State Finished

Completed on Thursday, 15 September 2016, 12:46 PM

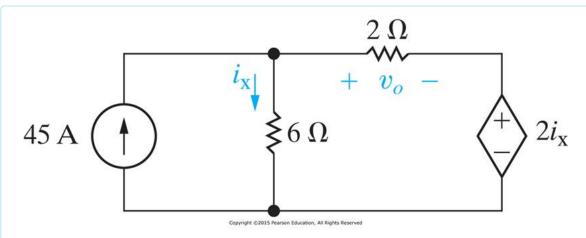
Time taken 2 days

Grade 100.00 out of 100.00

Question 1

Correct

Mark 10.00 out of 10.00



P2.32_10ed

a) Find v_0 .

b) Find the total power supplied in the circuit.

Numeric Answer

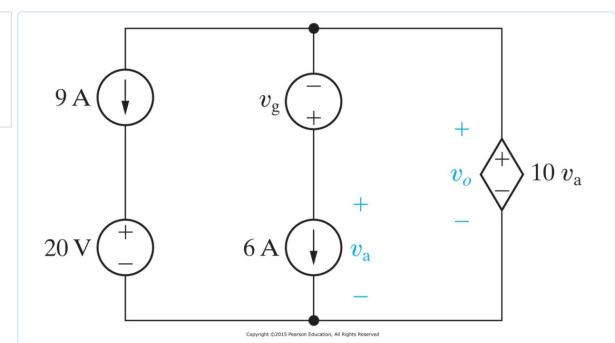
a)
$$v_0 = 60 \text{V}$$

b) $P_{del,total} = -4,050 \text{ Watts delivered}$

Correct

Correct

Mark 10.00 out of 10.00



P2.10_10ed

Given that $v_0 = 5$ Volts.

Find the total power delivered in the circuit. $P_{del,total} = ?? W$

Answer: -210

Numeric Answer

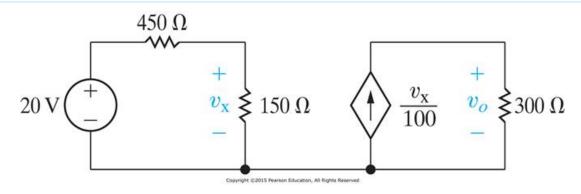
P_{del,total} = -210 Watts

The correct answer is: -210

Correct

Correct

Mark 10.00 out of 10.00



P2.33_10ed

a) Find v_0 .

b) Find the total power supplied in the circuit.

Numeric Answer

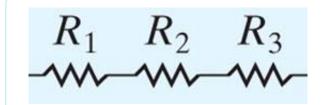
a)
$$v_0 = 15V$$

b)
$$P_{abs,total} = 1.417 \text{ Watts absorbed}$$

Correct

Correct

Mark 10.00 out of 10.00



CQ3.01

Given:

 $\rm R^{}_1$ = 147561 $\!\Omega$ (Ohms) $\rm \ R^{}_2$ = 146102 $\!\Omega$ (Ohms) $\rm \ R^{}_3$ = 65755 $\!\Omega$ (Ohms)

Find the equivalent resistance $R_{\rm Eq}$.

$$\boldsymbol{R}_{\text{Eq}}$$
 = ?? $\boldsymbol{\Omega}$ (Ohms)

Answer: 359418

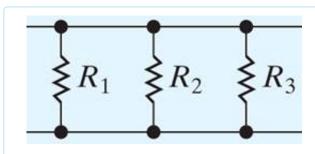
Calculated question

The correct answer is: 359418.00

Correct

Correct

Mark 10.00 out of 10.00



CQ3.02

Given:

 $\rm R^{}_1 = 269962~\Omega$ (Ohms) $\rm ~R^{}_2 = 656600~\Omega$ (Ohms) $\rm ~R^{}_3 = 38924~\Omega$ (Ohms)

Find the equivalent resistance $\boldsymbol{R}_{\text{Eq}}.$

$$\boldsymbol{R}_{\text{Eq}}$$
 = ?? $\boldsymbol{\Omega}$ (Ohms)

Answer: 32343

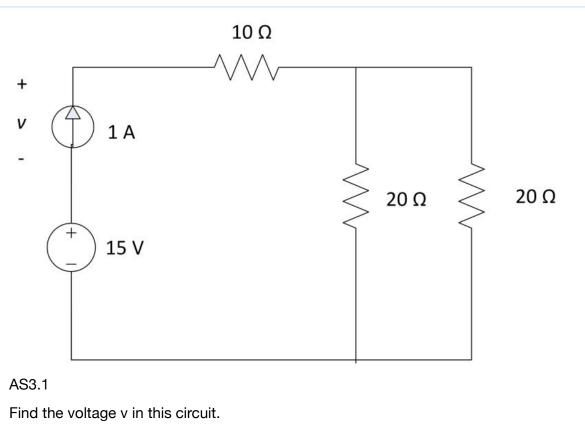
Calculated question

The correct answer is: 32343.29

Correct

Correct

Mark 10.00 out of 10.00



$$v = ??$$
 Volts

Answer: 5

Numeric Answer

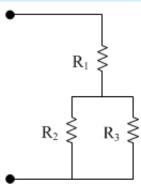
v = 5 V

The correct answer is: 5

Correct

Correct

Mark 10.00 out of 10.00



CQ3.04

Given:

$$\boldsymbol{R}_1 = 240568~\Omega$$
 (Ohms) $\boldsymbol{R}_2 = 343374~\Omega$ (Ohms) $\boldsymbol{R}_3 = 74235~\Omega$ (Ohms)

Find the equivalent resistance R_{Eq} . $R_{Eq} = ?? \Omega$ (Ohms)

Answer:

301606.84

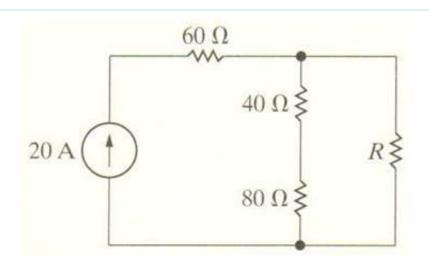
Calculated question

The correct answer is: 301606.84

Correct

Correct

Mark 10.00 out of 10.00



AP3.03_9ed

a) Find the value of R that will cause 4 A of current to flow through the 80 Ω resistor in the circuit.

$$R = 30$$
 $\checkmark \Omega$ (Ohm)

b) How much power will the resistor R from part (a) need to dissipate?

c) How much power will the current source generate for the value of R from part (a)?

"-" = "delivering" and "+" = "absorbing"

Numeric Answer

a)
$$R = 30 \Omega$$

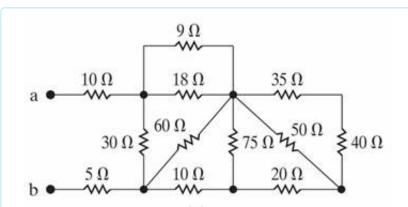
b)
$$P_{R} = 7680 \text{ W}$$

c)
$$P_{20A} = -33,600 \text{ W}$$

Correct

Correct

Mark 10.00 out of 10.00



P3.06b_9ed

Find the equivalent resistance seen looking into terminals a,b.

$$R_{Eq} = ?? \Omega \text{ (Ohms)}$$

Answer: 30

Numeric Answer

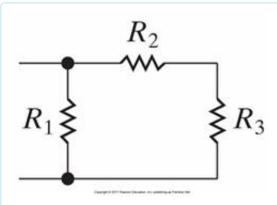
$$R_{Eq} = 30 \Omega$$

The correct answer is: 30

Correct

Correct

Mark 10.00 out of 10.00



CQ3.03

Given:

$$R_1 = 72951 \Omega \text{ (Ohms)}$$
 $R_2 = 712052 \Omega \text{ (Ohms)}$ $R_3 = 73257 \Omega \text{ (Ohms)}$

Find the equivalent resistance R_{Eq} . $R_{Eq} = ?? \Omega$ (Ohms)

Answer:

66750.26

Calculated question

The correct answer is: 66750.26

Correct