



Universidad Autónoma de Coahuila

Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14137625
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JESUS EMMANUEL MORALES MENUIOLA		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 70\ \Omega$, $L = 30\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

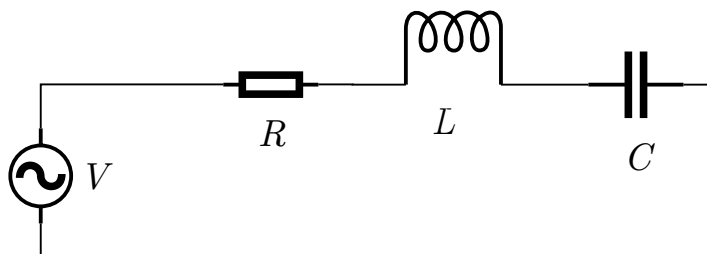


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14121732
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOEL GERARDO AGUERO LLANAS		

Instructions

- In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

- In the following RLC series circuit, $R = 30\ \Omega$, $L = 30\text{ mH}$, and $C = 700\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

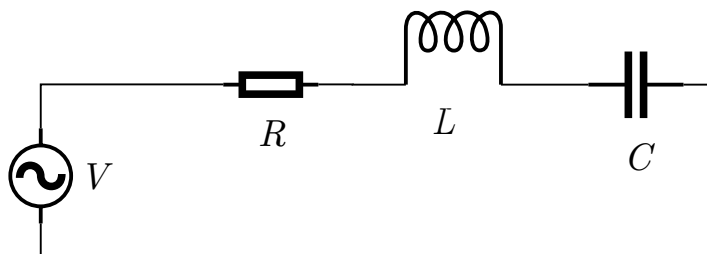


Figure 1

- A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - Calculate the resistance of the heater. (2 points)
 - If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
- What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14124427
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JERSON CHAVEZ ORTIZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 20\ \Omega$, $L = 80\text{ mH}$, and $C = 600\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

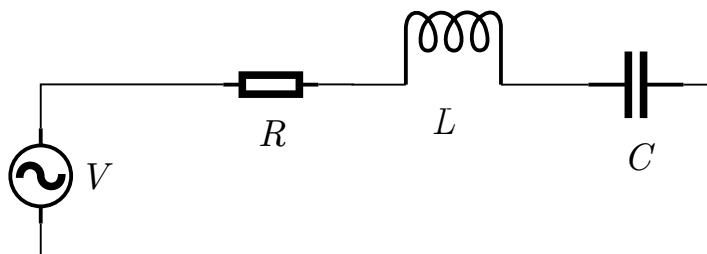


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14156040
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	LUIS ANTONIO FERNENDEZ CARRASCO		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 70\ \Omega$, $L = 40\text{ mH}$, and $C = 400\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

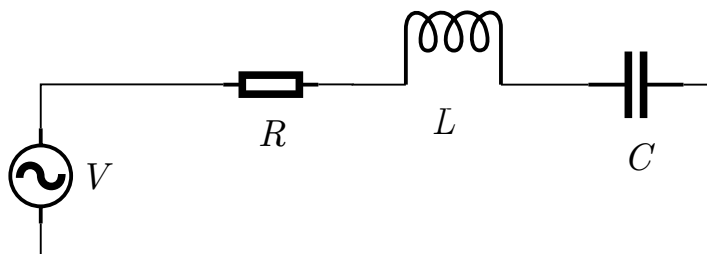


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14156037
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	MICHAEL MURILLO MENDEZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 50 \Omega$, $L = 90 \text{ mH}$, and $C = 900 \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

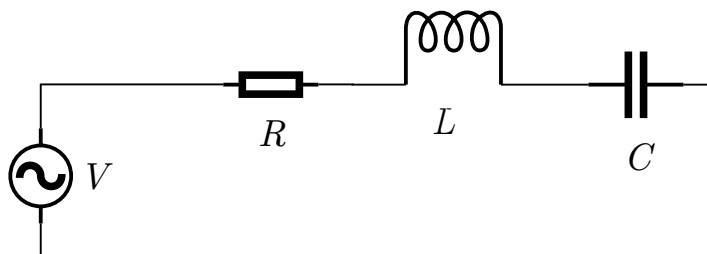


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	11073892
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOSUE AMADOR SIFUENTES		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 70\ \Omega$, $L = 30\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

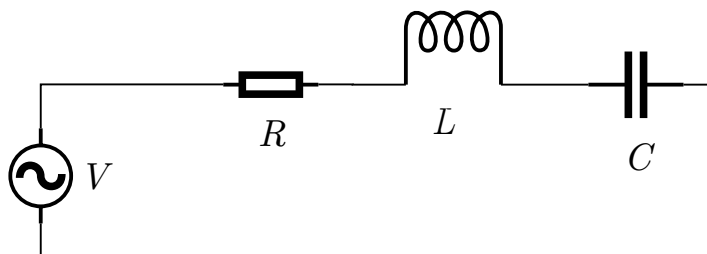


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
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Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	11268436
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	EDUARDO ZALDIVAR MARTINEZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 20\ \Omega$, $L = 50\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

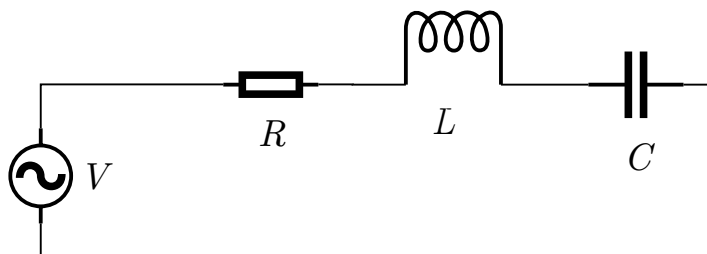


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
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Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14140390
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	LUIS DAVID MARENTES REYES		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 20\ \Omega$, $L = 90\text{ mH}$, and $C = 600\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

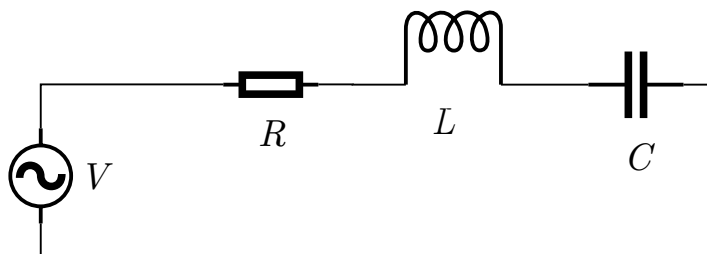


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	12068799
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JESUS ANTONIO ROBLESREYES		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 80\ \Omega$, $L = 30\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

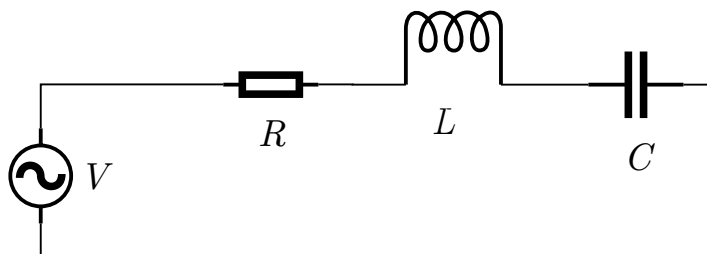


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14150725
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	LILIANA VERA GLZ		

Instructions

- In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

- In the following RLC series circuit, $R = 90\ \Omega$, $L = 20\text{ mH}$, and $C = 800\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

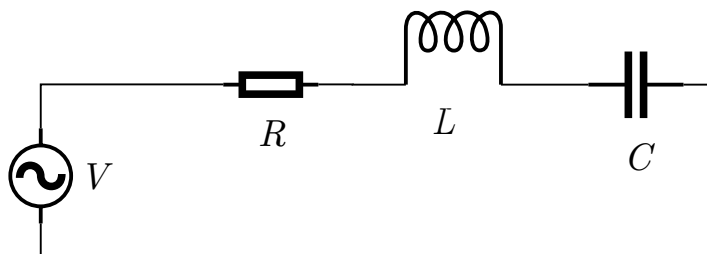


Figure 1

- A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - Calculate the resistance of the heater. (2 points)
 - If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
- What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14125016
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	DAVID OTHONIEL SALDIVAR PEREZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 40\ \Omega$, $L = 80\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

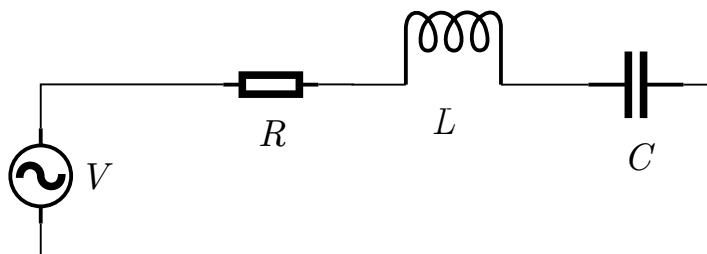


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	1205596
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	ALBERTO VAZQUEZ MEDINA		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 60\ \Omega$, $L = 90\text{ mH}$, and $C = 900\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

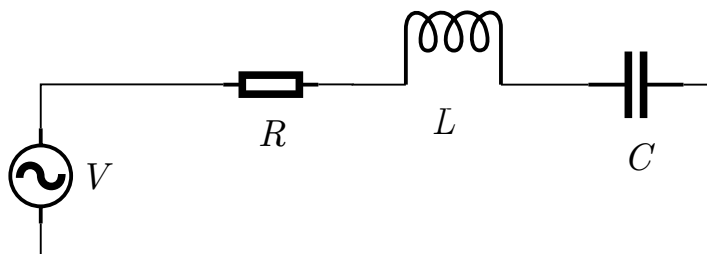


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	12666518
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	SAMUEL ROSAS GONZALEZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 30\ \Omega$, $L = 80\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

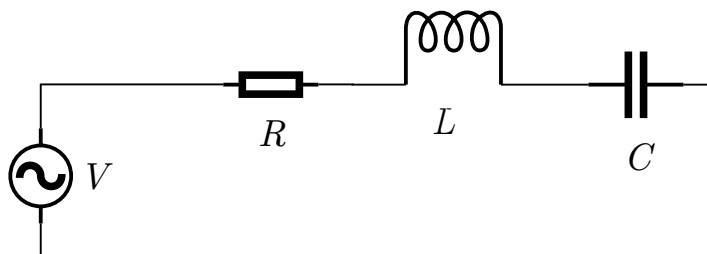


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	12064655
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	EDSON ORLANDONAVARRO RAMIREZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 40\ \Omega$, $L = 60\text{ mH}$, and $C = 800\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

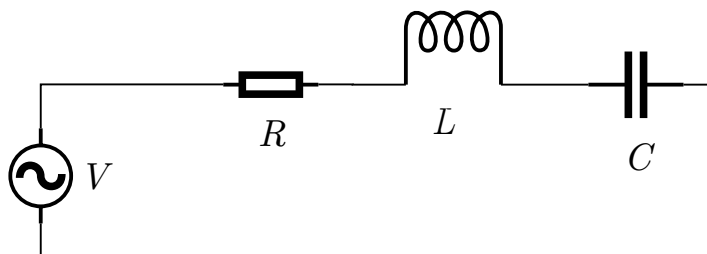


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	11126870
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JUAN GAEL GONZALEZ RODRIGUEZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 40\ \Omega$, $L = 70\text{ mH}$, and $C = 400\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

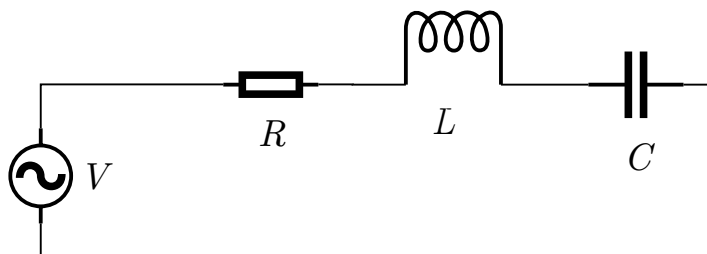


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14155580
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	LUIS ALEJANDRO URBINA GONZALEZ		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding.
(20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 90\ \Omega$, $L = 50\text{ mH}$, and $C = 500\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

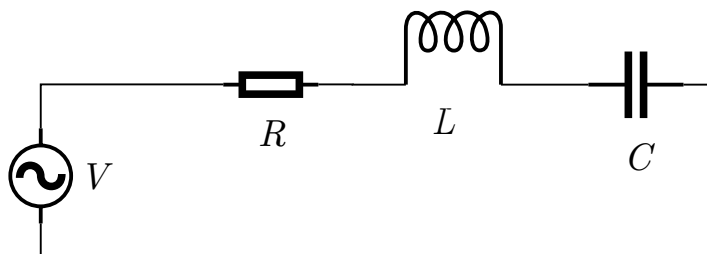


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job?
How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)



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Unidad Torreón

Subject	Circuit analysis II	Group	5A
Degree	Electrical engineering	Date	25/11/2016
Exam / Homework	Final Exam (Max time: One hour)	Registration #	14629184
Professor's name	Dr. Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOSE WALDO QUINTANA ARANDA		

Instructions

1. In the calculations, the student should maintain at least a precision of 3 decimal places with a correct rounding. (20% of the marks obtained will be reduced)

Questions

1. In the following RLC series circuit, $R = 70\ \Omega$, $L = 80\text{ mH}$, and $C = 400\ \mu\text{F}$. Calculate the resonant frequency for the circuit. (10 point)

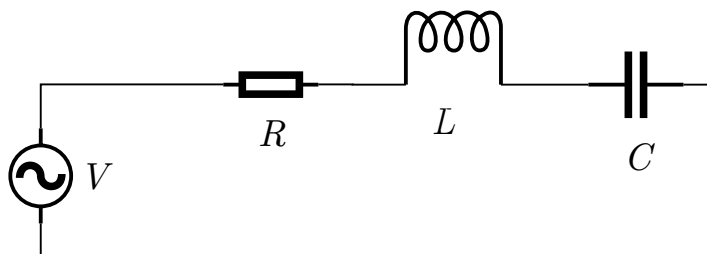


Figure 1

2. A pure resistive heater of 500 W is connected to the mains of 120 V at 60 Hz.
 - (a) Calculate the resistance of the heater. (2 points)
 - (b) If two heaters are connected in series, what is the power consumed by each heater? (2 points)
 - (c) If a heat equivalent to 750 W is required, what are the minimum numbers of heaters required to do the job? How are they connected? (2 points)
3. What is the root mean square value of a fully wave rectifier? Show all the work. (3 points)