



Universidad Autónoma de Coahuila

Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15128916
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	PEDRO FRAIRE SOLÍS		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

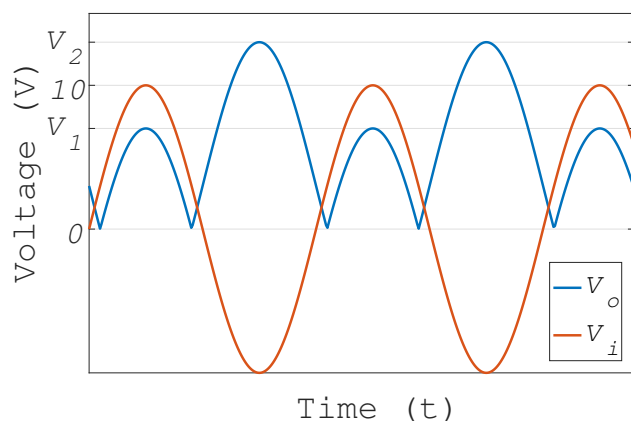


Figure 1: Input (V_i) and output (V_o) voltage curves

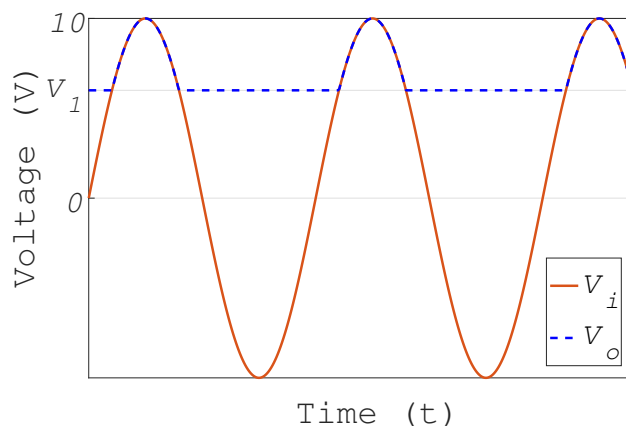


Figure 2: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 8$ V and $V_2 = 18$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 2$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15132525
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JULIO CÉSAR LOZANO ALMAGUER		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

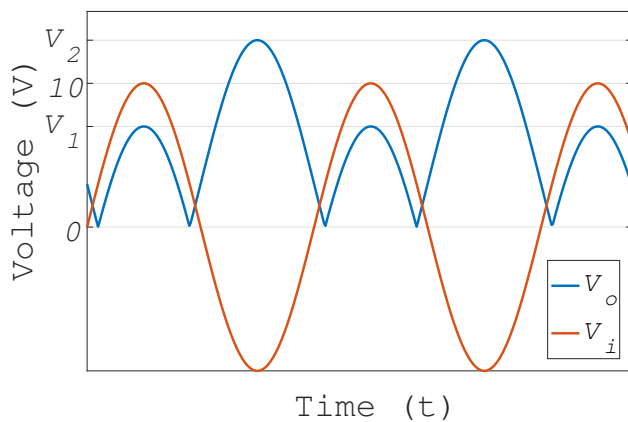


Figure 3: Input (V_i) and output (V_o) voltage curves

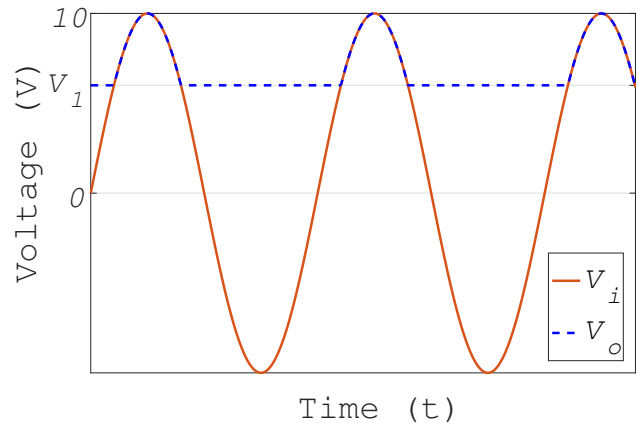


Figure 4: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 3$ V and $V_2 = 13$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 4$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15158174
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JORGE LUIS DÍAZ ENRÍQUEZ		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

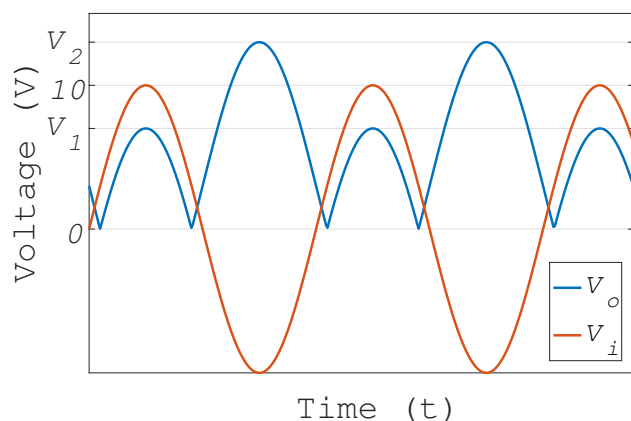


Figure 5: Input (V_i) and output (V_o) voltage curves

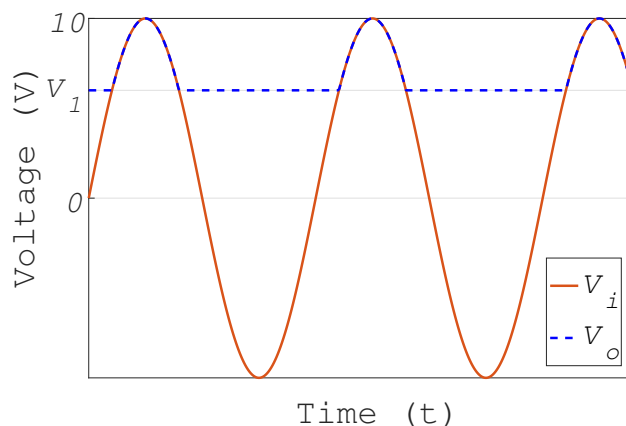


Figure 6: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 4$ V and $V_2 = 14$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 5$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15149897
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JULIO CÉSAR GARCÍA CASTILLO		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

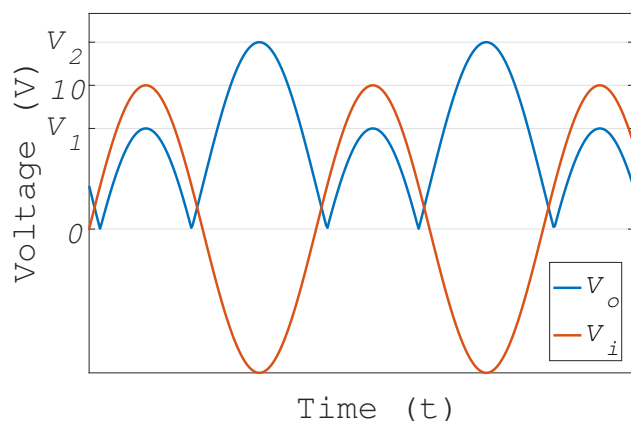


Figure 7: Input (V_i) and output (V_o) voltage curves

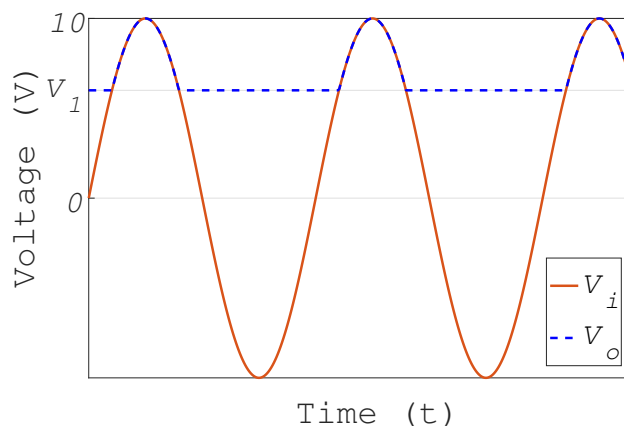


Figure 8: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 2$ V and $V_2 = 12$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 5$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15133897
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	VÍCTOR MANUEL GARCÍA CARRILLO		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

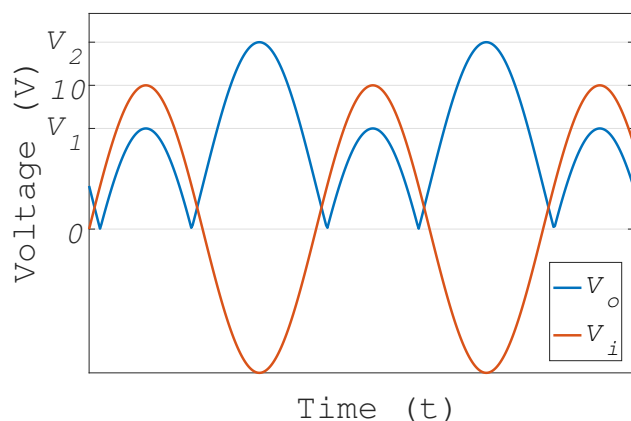


Figure 9: Input (V_i) and output (V_o) voltage curves

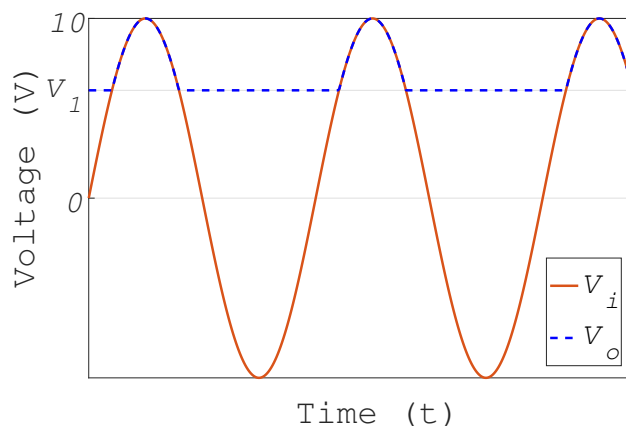


Figure 10: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 4$ V and $V_2 = 14$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 9$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15132740
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOVANA SOLEDAD GARCÍA REYES		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

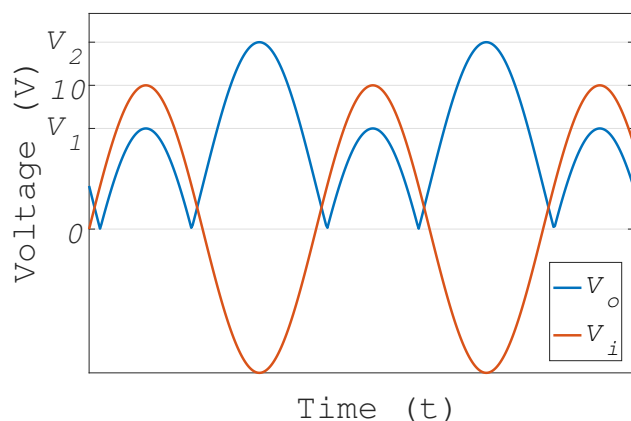


Figure 11: Input (V_i) and output (V_o) voltage curves

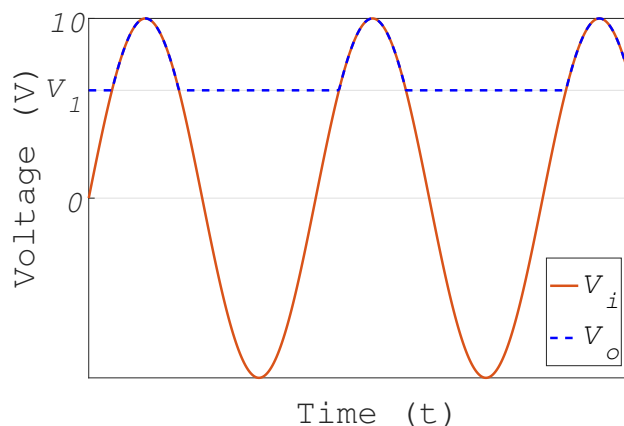


Figure 12: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 4$ V and $V_2 = 14$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 8$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15141730
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	VÍCTOR MANUEL PUENTES RODRÍGUEZ		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

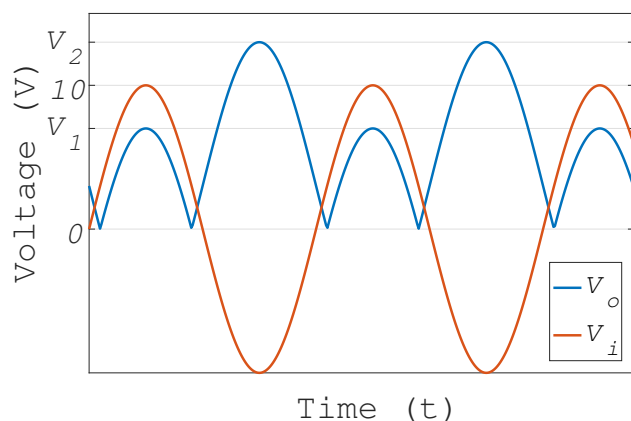


Figure 13: Input (V_i) and output (V_o) voltage curves

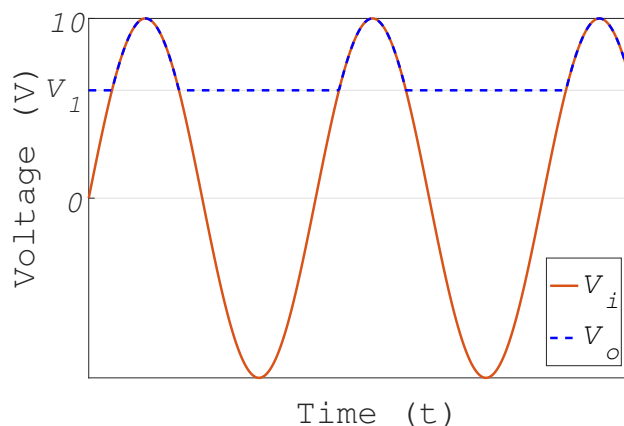


Figure 14: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 7$ V and $V_2 = 17$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 2$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15153534
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOSÉ ANTONIO RINCÓN ACOSTA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

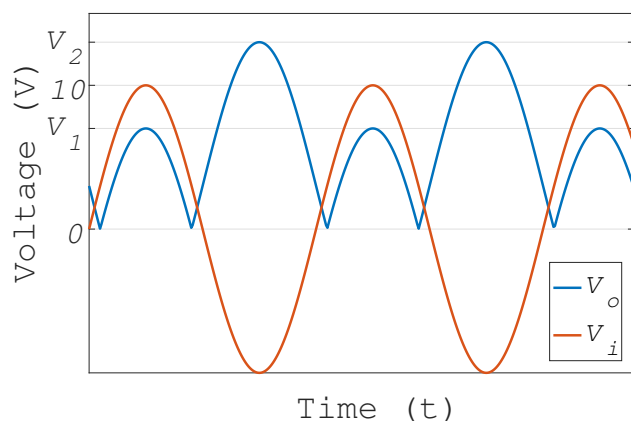


Figure 15: Input (V_i) and output (V_o) voltage curves

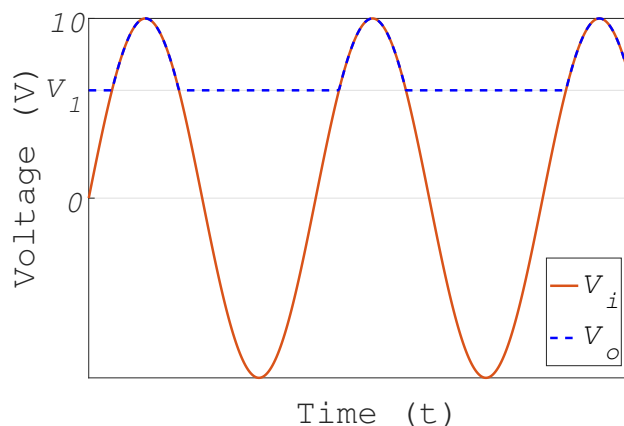


Figure 16: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 4$ V and $V_2 = 14$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 8$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15149344
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	FABIÁN ALONSO SOTO LUNA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

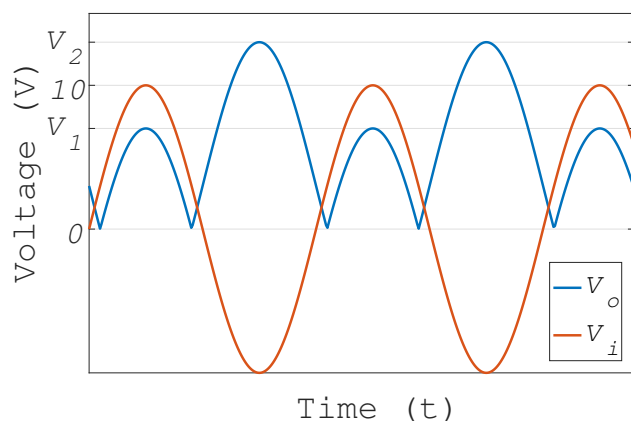


Figure 17: Input (V_i) and output (V_o) voltage curves

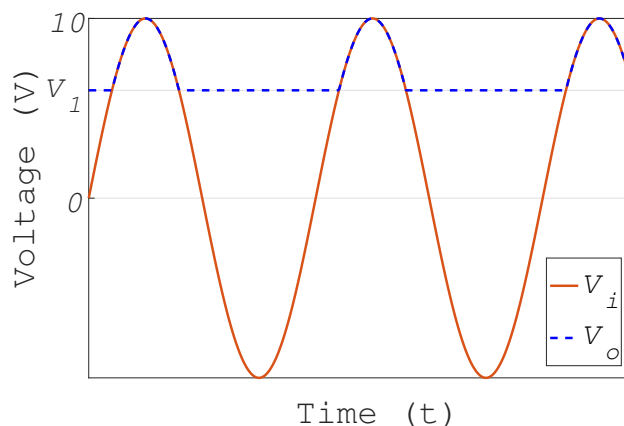


Figure 18: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 7$ V and $V_2 = 17$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 3$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15140545
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	MAYRA SELENE MIRELES CARDOZA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

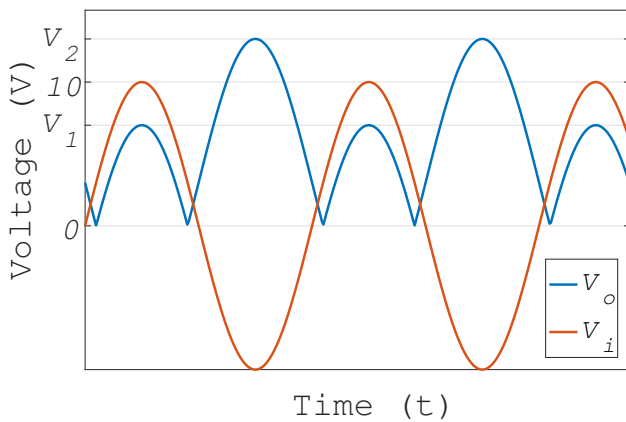


Figure 19: Input (V_i) and output (V_o) voltage curves

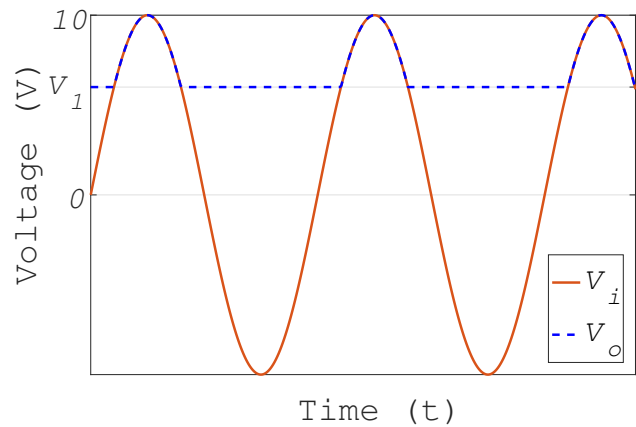


Figure 20: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 2$ V and $V_2 = 12$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 2$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15315202
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	ALAN M. CABRERA MORA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

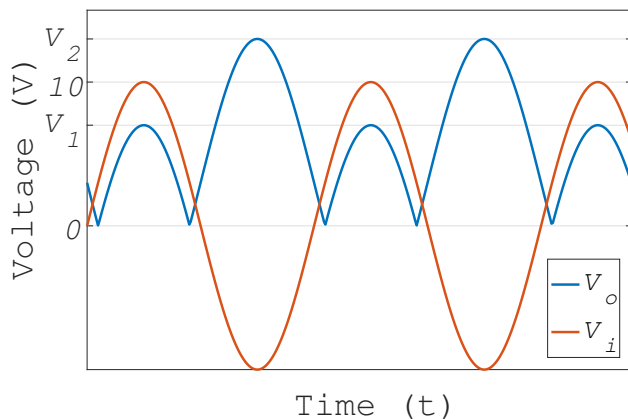


Figure 21: Input (V_i) and output (V_o) voltage curves

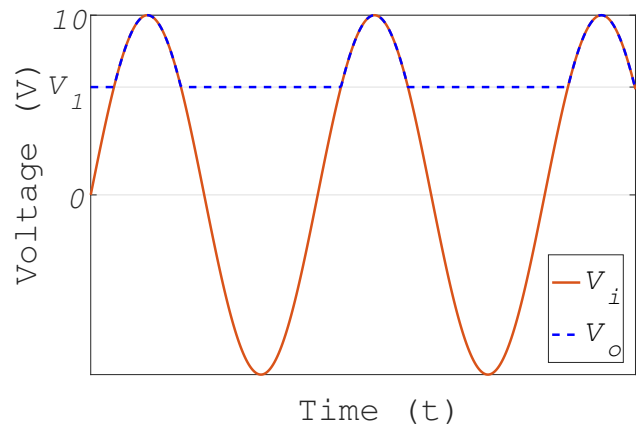


Figure 22: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 5$ V and $V_2 = 15$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 6$ V.



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Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	13056433
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	DANIEL ALEJANDRO CARRILLO HERNÁNDEZ		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

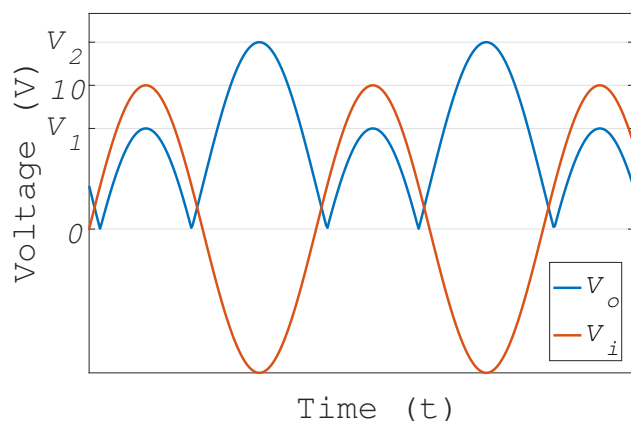


Figure 23: Input (V_i) and output (V_o) voltage curves

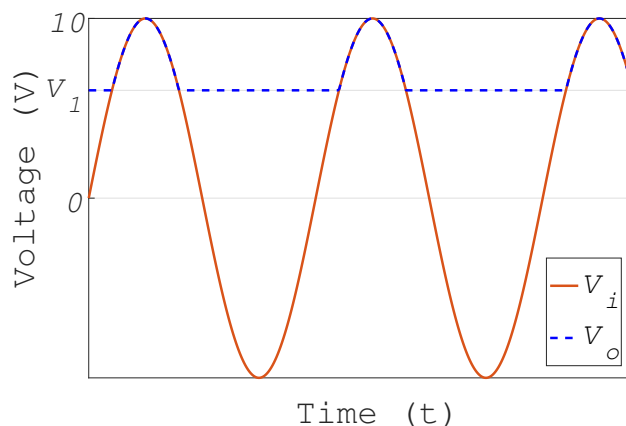


Figure 24: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 9$ V and $V_2 = 19$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 3$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15122162
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	ORLANDO BARBOZA GARCÍA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

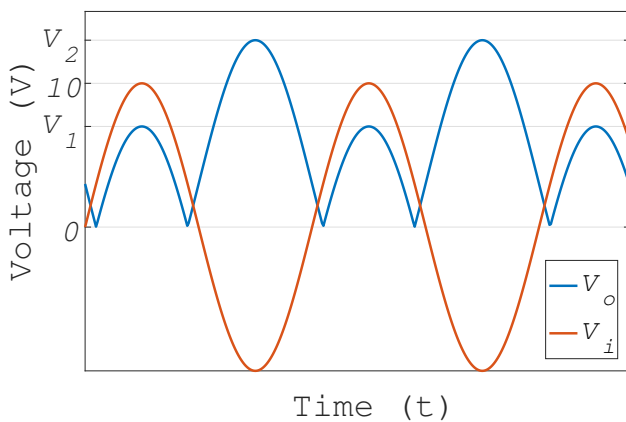


Figure 25: Input (V_i) and output (V_o) voltage curves

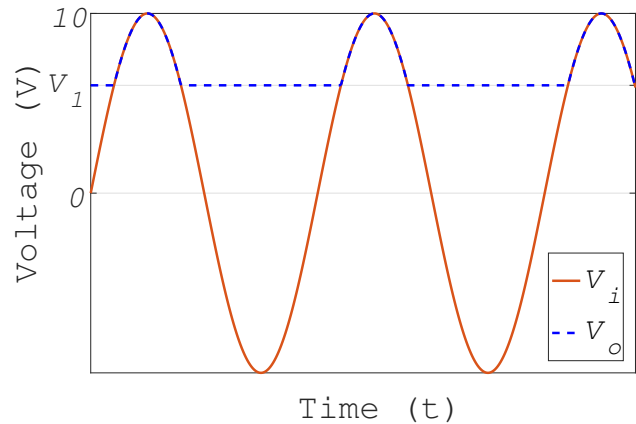


Figure 26: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 9$ V and $V_2 = 19$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 6$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	10069634
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	EDUARDO TORRES GOITIA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

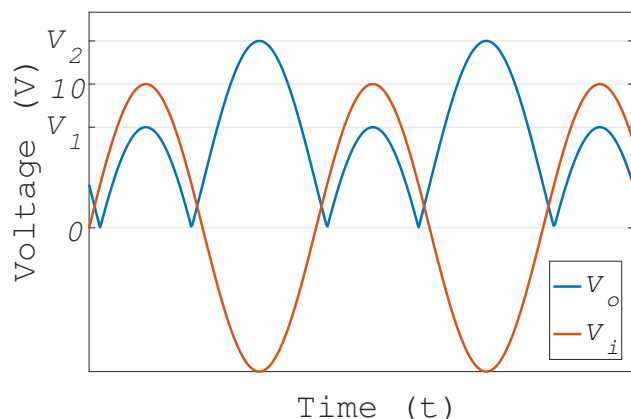


Figure 27: Input (V_i) and output (V_o) voltage curves

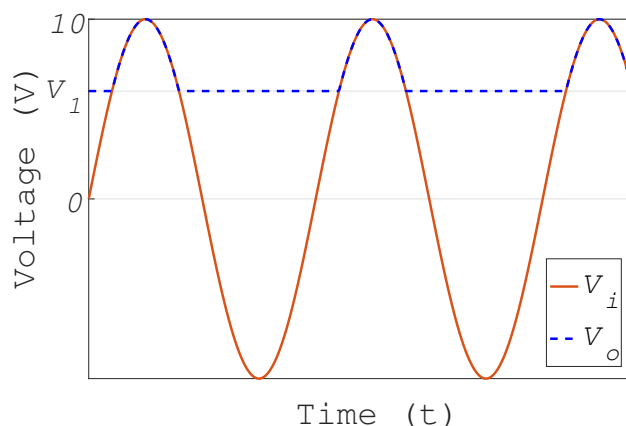


Figure 28: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 8$ V and $V_2 = 18$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 2$ V.



Universidad Autónoma de Coahuila

Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15157355
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	VICTOR SIFUENTES VARGAS		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

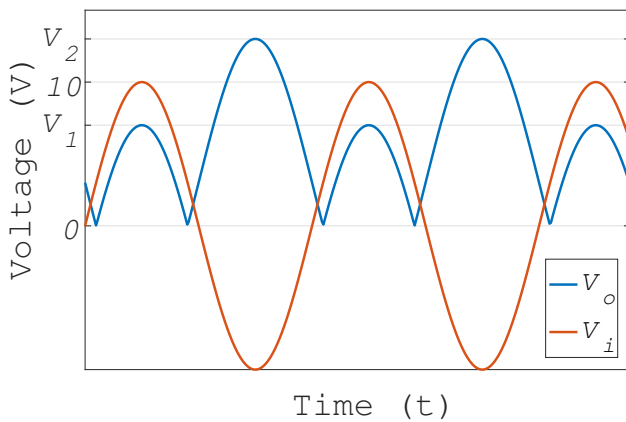


Figure 29: Input (V_i) and output (V_o) voltage curves

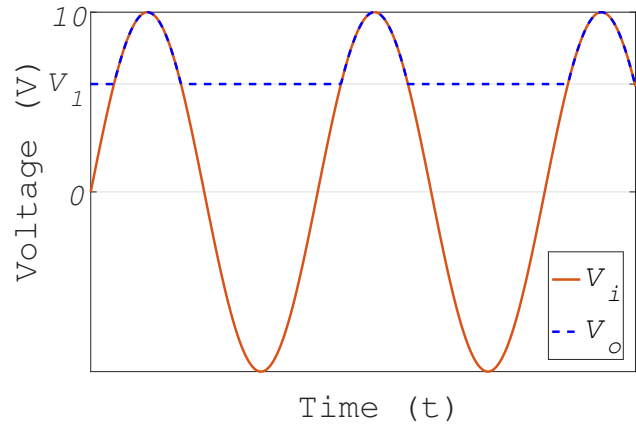


Figure 30: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 2$ V and $V_2 = 12$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 8$ V.



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Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	14576492
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JONATHAN RODRÍGUEZ CHÁVEZ		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

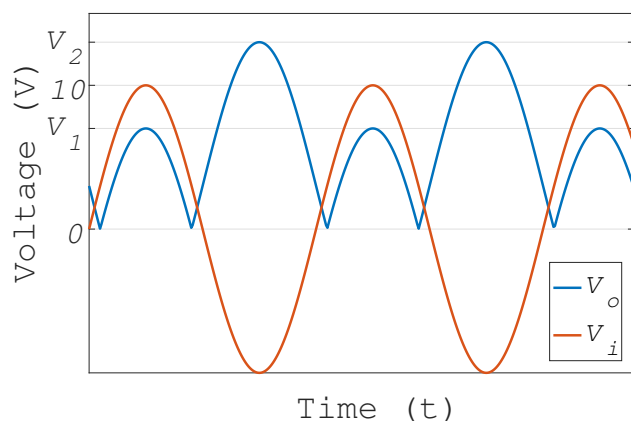


Figure 31: Input (V_i) and output (V_o) voltage curves

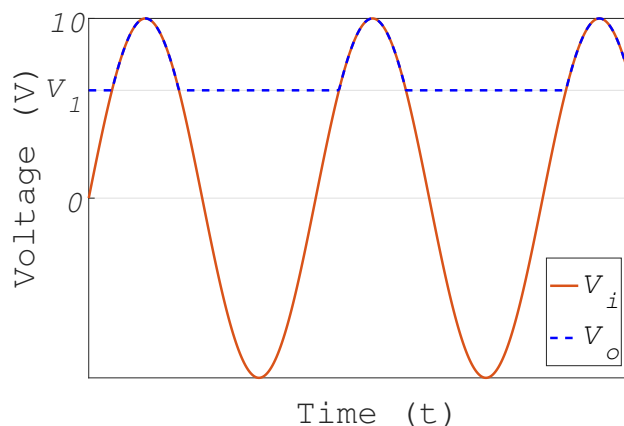


Figure 32: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 9$ V and $V_2 = 19$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 6$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	15129708
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	LUIS FERNANDO CASTAÑEDA QUIROGA		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

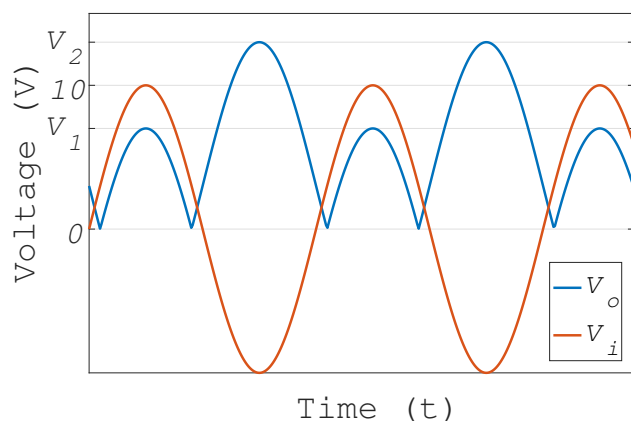


Figure 33: Input (V_i) and output (V_o) voltage curves

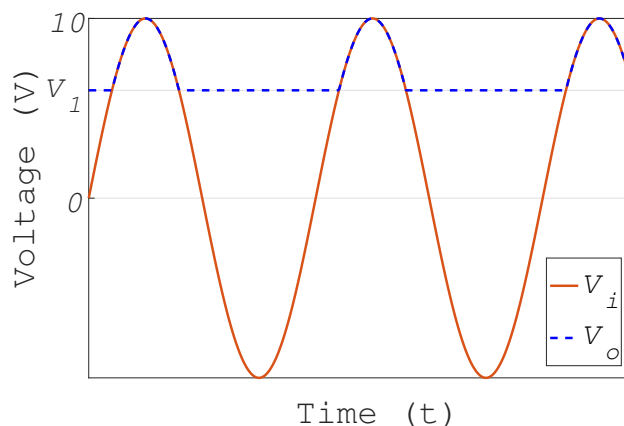


Figure 34: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 4$ V and $V_2 = 14$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 2$ V.



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Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	14317737
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	VANESA IRANÍ MORA MORENO		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

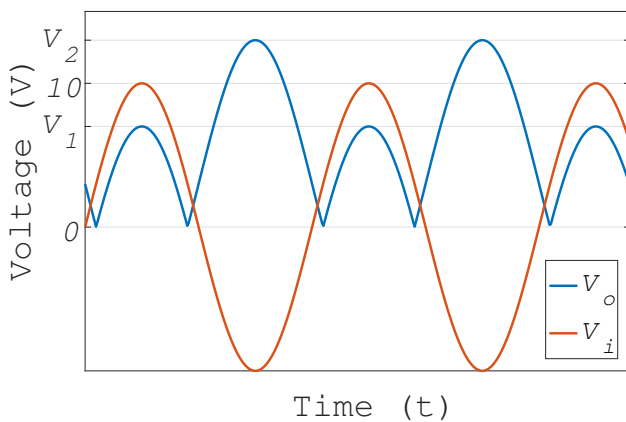


Figure 35: Input (V_i) and output (V_o) voltage curves

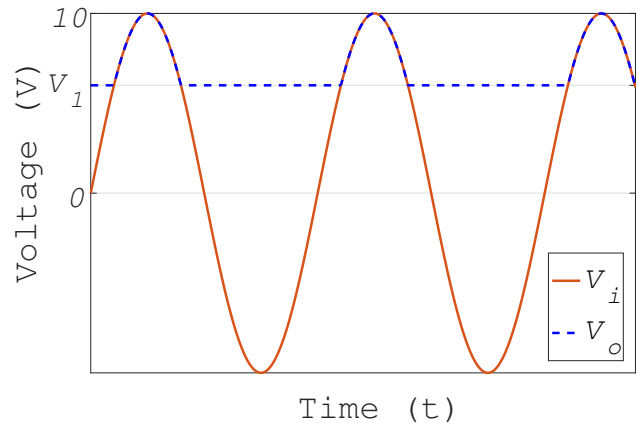


Figure 36: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 3$ V and $V_2 = 13$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 7$ V.



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Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	07272835
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	CASTREJÓN ALFARO SERGIO PABLO		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

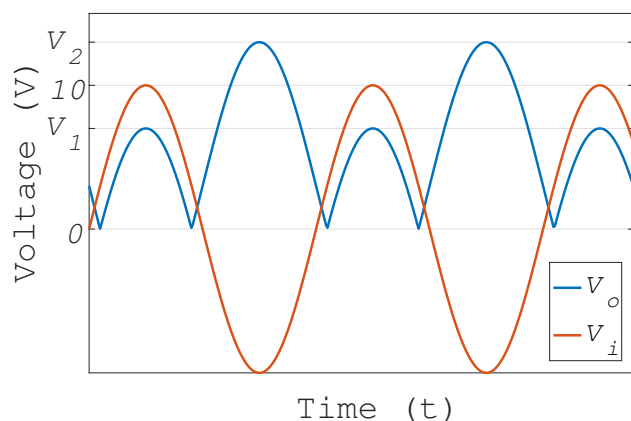


Figure 37: Input (V_i) and output (V_o) voltage curves

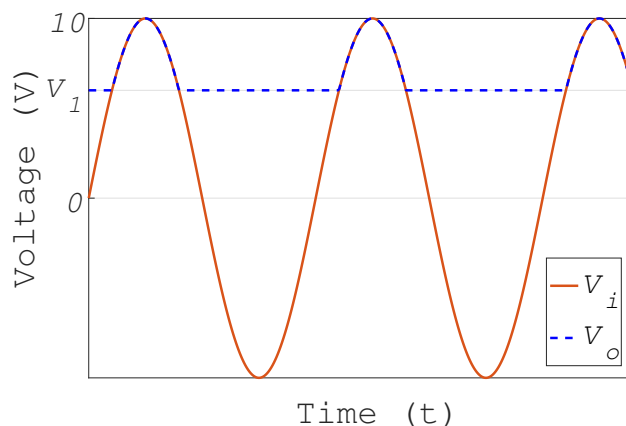


Figure 38: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 5$ V and $V_2 = 15$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 4$ V.



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Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	08060551
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	MARTÍNEZ MURILLO BRANDON ALAN		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

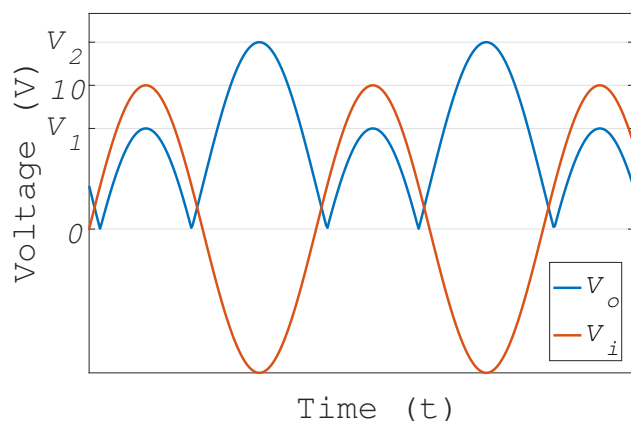


Figure 39: Input (V_i) and output (V_o) voltage curves

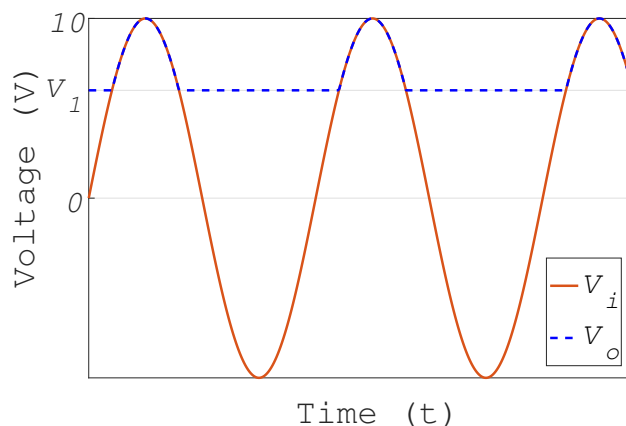


Figure 40: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 7$ V and $V_2 = 17$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 8$ V.



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Unidad Torreón

Subject	Semiconductor physics	Group	4A
Degree	Electrical engineering	Date	06/03/2017
Exam / Homework	Homework 4: Clipper and clamper	Registration #	07058521
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	MÁRQUEZ RIVERA IVAN OSWALDO		

Instructions

1. The student should submit the homework on or before the due date. (LATE SUBMISSION = 0 MARKS)
2. Answers should be hand written on a A4 or a letter size bond papers. (20% of the marks obtained will be reduced)
3. The student should print his/her corresponding question-paper and staple it along with his/her answer sheets. (20% of the marks obtained will be reduced)
4. 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

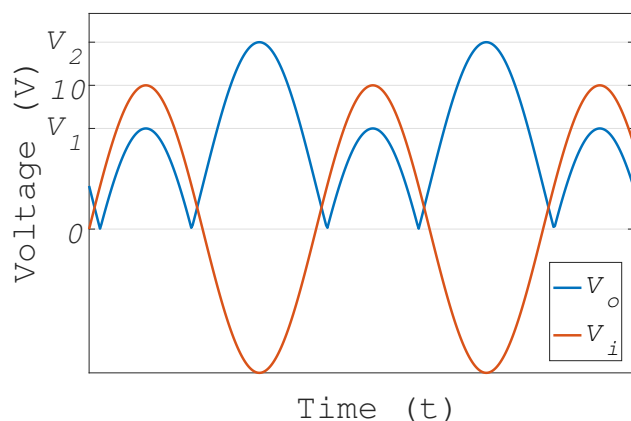


Figure 41: Input (V_i) and output (V_o) voltage curves

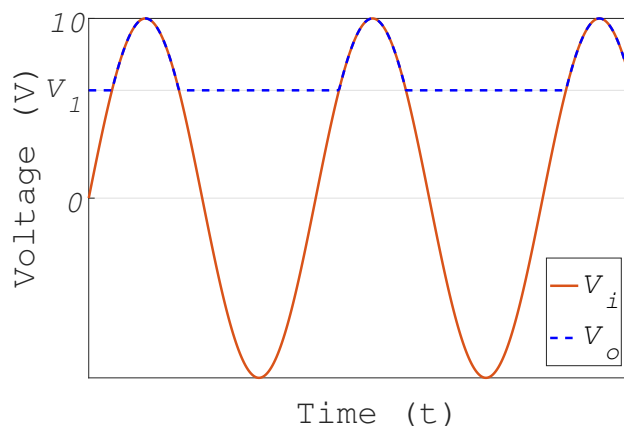


Figure 42: Input (V_i) and output (V_o) voltage curves

1. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generates an output V_o as shown in Figure 1. Where $V_1 = 6$ V and $V_2 = 16$ V
2. Design a circuit which takes the input voltage $V_i = 10 \sin(120\pi t)$ V and generate an output V_o as shown in Figure 2. Where $V_1 = 5$ V.