



Universidad Autónoma de Coahuila

Facultad de Ingeniería Mecánica y Eléctrica

Unidad Torreón

Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	18601252
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	CÉSAR ULISES TAPIA SCHUMM		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 17 seats for executive class. However, at least 3 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1300 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?



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Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	10582428
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	FRANCISCO JAVIER ROJAS GONZÁLEZ		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 23 seats for executive class. However, at least 5 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1400 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?



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Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	11076907
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JOSE EDUARDO ROCHA MEDINA		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 14 seats for executive class. However, at least 4 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1000 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?



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Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	09576464
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	<i>ASDISDE FACCUSEH SUÁREZ</i>		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 16 seats for executive class. However, at least 4 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1200 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?



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Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	11073201
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	ARIEL DOMÍNGUEZ PACHECANO		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 19 seats for executive class. However, at least 5 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1100 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?



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Subject	Practical optimization	Group	2
Degree	Masters in clean energy	Due for	30/09/2019
Exam / Homework	Homework 3: 2 Variable linear programming	Registration #	17611352
Professor's name	Suresh Kumar Gadi	Marks Obtained	____ / 10
Student's name	JORGE ALBERTO AVILÉS CASTRO		

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 the A4 or Letter size bond papers. (20% of the marks obtained will be reduced)
3. 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. An aeroplane can carry a maximum of 200 passengers. A profit of MXN 1000 is made on each executive class ticket and a profit of MXN 600 is made on each economy class ticket. The airline reserves at least 24 seats for executive class. However, at least 3 times as many passengers prefer to travel by economy class than by the executive class. Determine how many tickets of each type must be sold in order to maximise the profit for the airline. What is the maximum profit?
2. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1500 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of MXN 12 and MXN 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximise the profit?