

- **Read the Case Study Below:**

A company, "EcoFurniture," produces two types of products: *Luxury Chairs* and *Standard Chairs*. Each product requires limited resources: labor hours, machine hours, and raw materials. The table below summarizes the data for each product:

Product	Contribution Margin per Unit (\$)	Labor Hours per Unit	Machine Hours per Unit	Raw Material per Unit (kg)
Luxury Chair	50	3	2	5
Standard Chair	30	2	1	3

The company has the following constraints for the next production period:

- Total available labor hours: **300 hours**
- Total available machine hours: **200 hours**
- Total available raw materials: **400 kg**

- **Questions to Answer:**

- a. Which product should the company prioritize to maximize its total contribution margin? Explain your reasoning using calculations.
- b. How many units of each product should the company produce under the given constraints? Justify your answer using an appropriate decision-making method (e.g., contribution margin per constrained resource).
- c. Discuss how the company could overcome these constraints in the future. Suggest at least two strategies to increase production capacity or efficiency.

- **Submission Guidelines:**

- Prepare a report (2-3 pages) with your analysis and recommendations.
- Include detailed calculations and explanations for your decisions.
- Use tables and graphs if necessary to support your answers.