



2026

中国大学生方程式系列赛事
FORMULA STUDENT CHINA

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成本项目案例分析题目 (Chinese Version)

你是一名高级职业经理人，受雇于一家成立 17 年的赛车公司，担任首席执行官的职务。你们公司经过多年的经营，一共拥有两家大型卡丁车场和一家拥有 F3 级别赛道的赛车场，坐落于本市和临近城市。除此之外，你们还拥有自己的研发和生产基地，可以生产卡丁车和入门级方程式赛车，其中卡丁车年产量在 300 台左右，入门级方程式赛车在 80 辆左右，分别供应自己的赛车场和国内其他赛车俱乐部。

此前，你们通过与一家运动相关领域的国际公司“极限运动”的多轮沟通，已经达成合作意向，“极限运动”计划分批采购你们公司的入门级方程式赛车，采购计划如下表所示。本次合作方案为“极限运动”将统一购买赛车，然后自行进行国内和国外市场的销售工作，你们公司只负责进行生产，不介入后续市场和销售等工作。现在“极限运动”的初步采购价为 25 万人民币一辆。你们公司收到报价后，需要核算接受这个订单后内部生产，厂房，设备，人员，物流，材料采购等成本，并计算本单是否盈利，是否需要和“极限运动”再次讨论采购价格。

采购年份	第一年	第二年	第三年
采购数量	200	500	800

在你们与“极限运动”达成意向合作的消息传出后，投资公司 A 看好你们的发展，希望入股你们公司。董事会经过讨论后，同意引入新股东，减缓资金压力。投资公司 A 的风险投资人之前是某国内大型国有汽车公司的生产副总经理，也曾在研发部门担任总监职位，他对于赛车的技术突破和研发创新十分感兴趣，要求在未来三年中对赛车进行技术提升，但是也要控制整体成本。“极限运动”也同意对赛车进行性能的正优化，但是不要带来更多的成本负担。

你作为本次合作的负责人，你需要对新的董事会汇报以下内容：

1. 接下“极限运动”的订单后，已现有赛车设计方案需要投入多少成本，最后利润是多少？
2. 如何进行产品的正优化？与之带来的成本是多少？并解释这些设计变更的必要性和成本投入的合理性。
3. 整理下次需要和“极限运动”沟通的事宜，并希望达成什么样的目标。

Tip:

1. 题目中的赛车公司：你们的车队；
2. 题目中“本市”：即车队所在城市；
3. 入门级方程式赛车：即车队比赛赛车；
4. 现有赛车制造成本：即成本报告显示的成本价格；如果存在降本，降低的成本需要在成本标准表的原则下进行降本；
5. 成本标准表在本案例分析中，不在表示为生产一千辆赛车的成本值，而表示为当前你们赛车公司的生产入门级方程式赛车的成本；



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6. 车队需自行思考现有公司的规模和工厂信息和生产能力，并自行思考后续增加设备，厂房和人员等的投入成本。所有思考方案需要符合实际现实情况，具有逻辑合理性。



2026 Formula Student China Cost Event Real Case Scenario Topic

(English Version)

You are a senior professional manager employed by a racing company that has been established for 17 years, serving as the Chief Executive Officer. After years of operation, your company has amassed two large karting tracks and a racing track with an F3-level circuit, situated in this city and neighboring cities. Furthermore, you possess your own research and development as well as production base, capable of manufacturing karting vehicles and entry-level formula racing cars. The annual production capacity for karting vehicles stands at approximately 300 units, while that for entry-level formula racing cars is around 80 units, supplying both your own racing tracks and other domestic racing clubs.

Previously, through multiple rounds of communication with "Extreme Sports", an international company in the sports-related field, you have reached a cooperation intention. "Extreme Sports" plans to purchase your company's entry-level formula racing cars in batches, and the procurement plan is shown in the table below. The cooperation plan for this time is that "Extreme Sports" will purchase the racing cars in a unified manner and then handle the sales work in domestic and foreign markets on its own. Your company is only responsible for production and will not be involved in subsequent market and sales work. Currently, the initial purchase price for "Extreme Sports" is 250,000 RMB per car. After receiving the quotation, your company needs to calculate the costs of internal production, factories, equipment, personnel, logistics, material procurement, etc. after accepting this order, and determine whether this order is profitable or not, and whether it is necessary to discuss the purchase price with "Extreme Sports" again.

Purchase year	the first year	the second year	the third year
Purchase Quantity	200	500	800

After the news of your intended cooperation with "Extreme Sports" was released, investment company A, optimistic about your development, expressed interest in becoming a shareholder of your company. After discussion, the board of directors agreed to introduce new shareholders to alleviate financial pressure. The venture capitalist from investment company A was previously the deputy general manager of production at a large domestic state-owned automobile company and also served as the director of the research and development department. He is very interested in technological breakthroughs and research and development innovations in racing cars, and requires technological improvements in racing cars in the next three years, while also controlling overall costs. "Extreme Sports" also agrees to optimize the performance of racing cars, but without incurring additional cost burdens.

As the person in charge of this collaboration, you are required to report the following to the new board of directors:

4. After receiving the order for "extreme sports", how much cost will be required to implement the existing racing car design scheme, and what will be the final profit?
5. How to carry out positive optimization of the product? What is the cost associated with it? Explain the necessity of these design changes and the rationality of the cost investment.
6. Organize the matters that need to be communicated with "Extreme Sports" next time, and what goals we hope to achieve.

Tip:

1. The racing company mentioned in the question: your team;
2. In the title, "local city" refers to the city where the convoy is located;
3. Entry-level formula racing: that is, team racing;
4. Current racing car manufacturing cost: This refers to the cost price displayed in the cost report; if there is a cost reduction, the reduced cost needs to be implemented under the



principles of the cost standard table;

5. In this case analysis, the cost standard table is not represented as the cost value for producing one thousand racing cars, but rather as the cost for producing entry-level formula racing cars for your current racing car company;

6. The team needs to independently consider the current company's scale, factory information, and production capacity, as well as the investment costs for subsequent additions of equipment, factories, and personnel. All proposed solutions must align with the actual situation and be logically reasonable.