

STATISTICS GROUP PROJECT

The main objective of the project is not produce a written document equivalent to a term paper, but a written report should be submitted and it should include the following 12 components.

1. List of data collected. (At least 35)
2. The source(s) of the data.
3. Relevant graphs of your data, including the usage of the TI-83/TI-84 displays.
4. Relevant statistics:
 - a. Mean
 - b. Mode
 - c. Median
 - d. Mid-Range
 - e. Range
 - f. Standard deviation
5. Identifying the outlier(s) and its effect on overall result(s).
6. Identifying the distribution of the data.
7. Description of the method of analysis.
8. Estimating the population parameters. (Use a confidence level of 90%-99%)
9. Testing a claim about a population parameter. (Use a significance level of $.01 \leq \alpha \leq .05$)
10. Show all the calculations in details.
11. Statement of conclusions. (The most important part of the project)
12. Reasons why the results might not be correct, along with a description of ways in which the study could be improved, given sufficient time and money.

PLEASE SELECT ANY OF THE GIVEN TOPICS ON THE REVERSE SIDE OF THIS SHEET OR CHOOSE YOUR OWN TOPIC AFTER DISCUSSING IT AND BEING APPROVED BY ME

- ❖ Please note that I will correct your projects very carefully and remember that each part of your project worth certain percentage such as:
- Data collection: 10%
 - Relevant Graphs: 10%
 - Analysis of your data: 60%
 - Conclusion: 10%
 - Presentation: 10%

Good Luck!

Suggested Topics:

1. Proportion of foreign cars driven by students compared to the proportion of foreign cars driven by faculty.
2. Are husbands older than their wives?
3. Comparison of the ages of Science books and English books in our library.
4. Is there a relationship between hours studied and grades earned?
5. Is there a relationship between hours worked and grades earned?
6. Is there a relationship between taste and cost of different brands of chocolate chip cookies?
7. Is there a relationship between taste and cost of different brands of cola?
8. Are there differences in taste between ordinary tap water and different brands of bottled water?
9. A comparison of the number of credit cards carried by males and females.
10. Do left-handed people tend to be involved in more car crashes?
11. Do young drivers have more car crashes than older drivers?
12. Analysis of times that McDonald's patrons wait in line.
13. Is there support for the theory that cereals with high sugar content are placed on shelves at eye level with children?
14. Do men have more car crashes than women?
15. Does a sports team have an advantage by playing at home instead of away?