

Group Project Write-ups

You will be a member of a three or four person group. Each group is to hand in one written report detailing the solution to the problem. The report should be in paragraph form, but can utilize sections to help organize the paper. The paper should include the following four parts:

1. Problem and parameters.
2. Solution.
3. Methodology.
4. Conclusion.

Problem and Parameters

This section should contain the stated problem. Since the original problem will most likely be relatively vague, you are expected to generate details that enable you to solve the problem. For example, suppose I ask you to calculate the volume of the Richland water tower. You are expected to add additional parameters such as location (Tank Drive, Richland Township), general geometric structure (spherical), restrictions (no access to take direct measurements), etc. Each problem will differ and you are to adapt the parameters to each problem. Often times you will actually add parameters to help you solve the problem.

Solution

The solution section should present the answer to the problem along with any related dimensions or values of interest. This section needs to be clearly labeled and easy to locate since I will most likely look at your solution prior to actually reading your paper.

Methodology

This section should represent the bulk of the paper. You should present the plan (method) you use to solve the problem and the techniques you use to carry out the plan. Make sure to include how you collect your data as well as how you process your data. Be careful to acknowledge your resources and give credit where credit is due.

Conclusion

The conclusion is where you discuss the accuracy of your results. Include the strengths of your approach as well as the shortcomings. Additionally, this is where you can discuss why the problem was difficult as well as possible attempts at solving the problem that were not successful.

While these four sections are expected to be in your report, you are free to include additional sections as you see fit.

Grading

The grades will be determined out of a possible 20 points. The distribution will be as follows: structure and organization of the paper (2 pts); clarity and grammar (5 pts); diagrams, charts and tables (3 pts); and validity of your approach mathematically (10 pts). Included in the mathematical validity would be a valuation of parameters, appropriateness of the methodology, and accuracy of the implementation (for example, did you calculate using your data correctly).