

JUDGE NAME \_\_\_\_\_

| <b>Criteria</b>   | <b>Strong</b>  | <b>Medium</b>  | <b>Poor</b>  | <b>Points</b> |
|---|--|--|--|---------------|
| <b>Summary Sheet: Interpretation of Contest Problem</b> | Clear background, restates the problem and specifies focus areas of the paper, as well as stating all crucial assumptions<br><br><i>(5 points)</i>   | Mentions the problem, but does not specify the goals of the paper; not all key assumptions stated<br><br><i>(3 points)</i> | Problem not restated, no assumptions mentioned<br><br><i>(1 point)</i>             | /5            |
| <b>Summary Sheet: Overview of Methods</b>               | Indicates the methodology used, as well as their purposes in a chronological fashion; easy to understand and not too technical<br><br><i>(10 points)</i>                                       | Methods stated, unclear and difficult to understand<br><br><i>(6 points)</i>   | Methods barely or not mentioned, no explanations given<br><br><i>(2 points)</i>    | /10           |
| <b>Summary Sheet: Statement of Conclusions</b>          | Important results are included without becoming too specific, possible strengths and weaknesses mentioned<br><br><i>(10 points)</i>  | Results included, but not clear and/or possibly too technical<br><br><i>(6 points)</i>                                     | Few or no results, strengths and weaknesses not mentioned<br><br><i>(2 points)</i> | /10           |
| <b>Introduction</b>                                     | Includes background, clearly restates the problem, defines vague terms, briefly overviews approaches, important results with at most only one requiring modifications<br><br><i>(5 points)</i> | 2-3 of the requirements are missing<br><br><i>(3 points)</i>   | Requirements are missing<br><br><i>(1 point)</i>                                   | /5            |
| <b>Solution: Assumptions/ Justifications</b>            | Reasonable, does not overly limit the scope of the problem, majority of the justifications are appropriate and proven  | More than 25% of the solutions section do not meet the criteria, important assumptions are not mentioned                   | More than 50% do not meet the criteria, major assumptions are left out             | /5            |

|  | <b>(5 points)</b>   | <b>(3 points)</b>  | <b>(1 point)</b>  |     |
|--|---|--|---|-----|
| <b>Solution: Usage of Method(s)</b>              | Method(s) are used correctly, efficiently, and effectively for solving the problem<br><br><b>(10 points)</b>  | Method(s) are used correctly but do not return a reasonable result or are inefficient for solving the problem<br><b>(6 points)</b>                                     | Method(s) are incorrectly utilized<br><br><b>(2 points)</b>   | /10 |
| <b>Solution: Explanation</b>                     | All variables are clearly labeled, solution has detailed, accurate, and concise mathematical explanations for each step.<br><br><b>(20 points)</b>                        | Most variables are clearly labeled, presentation of solution is somewhat detailed, accurate, and concise, graphs and illustrations are explained<br><b>(15 points)</b> | Poor labeling of variables, presentation is vague/unclear and long winded<br><br><b>(5 points)</b>                                | /20 |
| <b>Solution: Supporting Figures and Graphics</b> | Graphs are pleasing and straightforward, enough graphs, not too many, related to the solution itself<br><b>(5 points)</b>   | Some graphs are hard to understand and/or simply unnecessary<br><b>(3 points)</b>  | Little to no graphs present and/or are poorly constructed<br><b>(1 point)</b>   | /5  |
| <b>Solution: Sensitivity/ Stability</b>          | Graphs presented with a clear restatement and explanation of selected numerical data, thoughtfully accounts for and explains any possible errors<br><br><b>(5 points)</b> | Graphs presented with restatement of data only, with little to no recognition of errors<br><b>(3 points)</b>   | insufficient and unclear graphs produced, none or almost no data presented, error interpretation is non-existent <b>(1 point)</b> | /5  |
| <b>Solution: Strengths &amp; Weaknesses</b>      | At least three strengths and weaknesses in total are proposed for each model, more than 90% of comments are insightful and reflective <b>(5 points)</b>                   | Amount met and 50%-90% of comments are strong<br><br><b>(3 points)</b>   | Not enough strengths and/or weaknesses OR less than 50% of remarks are above par<br><b>(1 point)</b>                              | /5  |

|                   |   |   |   |                |
|-------------------|---|---|---|----------------|
| <b>Conclusion</b> | The purpose, method, and result are clearly listed for each model<br><br><b>(10 points)</b>   | Summary of results is unclear, but the general idea of the group's findings is present<br><br><b>(6 points)</b> | Few or none of the requirements are present<br><br><b>(1 point)</b>                             | /10            |
| <b>Format</b>     | 0-1 criteria missing from the following:<br>- Length does not exceed 35 pages<br>- References are clearly represented and sources are correctly cited (Cannot just make one up)<br>- Formulas and graphs are plainly labeled<br>- Page number, control number are labeled according to the rules<br>- Table of Contents<br>- Correct font for code and body<br>- file type (PDF) <b>(10 points)</b> | 2-3 formatting criteria missing<br><br><br><br><br><br><br><br><br><br><b>(6 points)</b>                        | More than 3 formatting criteria missing<br><br><br><br><br><br><br><br><br><br><b>(1 point)</b> | /10            |
|                   |   |   |   | Total:<br>/100 |