#### **Summary**

The contest rules specify that you should include a one-page summary of your report. This page appears before the rest of the report, and will have a special header attached to it that takes up the top 2.5" of the page.

By typing your summary inside a summary environment, T<sub>E</sub>X will handle the formatting of that page correctly, including leaving space at the top of the page and not numbering the page.

It will also reset the page numbers so that the first page of your report is labeled correctly.

What should you put here? Basically, you want a brief restatement of the problem followed by a largely *non-technical* description of what you've done. Try to avoid using mathematical notation.

You probably want to write a few paragraphs, around half to two-thirds of a page.

For 2009, the COMAP folks said the following about the summary:

The summary is a very important part of your MCM paper. The judges place considerable weight on the summary, and winning papers are sometimes distinguished from other papers based on the quality of the summary. To write a good summary, imagine that a reader may choose whether to read the body of the paper based on your summary. Thus, a summary should clearly describe your approach to the problem and, most prominently, what your most important conclusions were. The summary should inspire a reader to learn the details of your work. Your concise presentation of the summary should inspire a reader to learn the details of your work. Summaries that are mere restatements of the contest problem, or are a cut-and-paste boilerplate from the Introduction are generally considered to be weak.

To Summarize:

**Restatement Clarification of the Problem** —state in your own words what you are going to do.

**Assumptions with Rationale/Justification** —emphasize those assumptions that bear on the problem. List clearly all variables used in your model.

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Model Design and justification for type model used/developed.

Model Testing and Sensitivity Analysis, including error analysis, etc.

Discuss strengths and weakness to your model or approach.

**Provide algorithms** in words, figures, or flow charts (as a step by step algorithmic approach) for all computer codes developed.

[1]

# Your Report Title

## ICM or MCM Contest Question A B C

### Team # xxxxx

## February 11, 2012

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#### 1 Introduction

Write an introduction to your report here. It should include a restatement of the problem, the history and context of the problem, and your work and results. Your introduction should be more detailed and technical than your summary. You may also want to include an outline of your report, along the lines of

In Section 1 we give our definitions and notation. Section 2 describes our numerical experiments.....

We prove our main result, Theorem 6, in Section 5....

Of course you would replace the numbers in that example with appropriate \ref commands pointing to the correct \labels in your source.

#### 2 First Section

Here's where you start to lay things out.

### 3 More Important Stuff

#### 3.1 Remember to Break Things Up Into Logical Sections

#### 4 Conclusion

Here's your big ending.

#### References

[1] COMAP. Contest registration and instructions. Website, 2009. URL http://www.comap.com/undergraduate/contests/mcm/instructions.php. Viewed on 2009 February 5.