BMCC MAT100.122 Project Draft

This is the second step of your project. It is due Tuesday November 23. It is worth 5 of a total 20 points for your project. Each point of your project grade corresponds to a point on your final grade. After this assignment, your project should be nearing at least three pages, but remember that you do not get points for pages, you get points for content. Your submission must be typed, double spaced and stapled. You must submit both digital and paper copies. If you cannot hand in your draft in class on the due date for any reason you must submit the digital copy by email¹ and place the paper copy in my box in N520. No late work will be accepted.

General guidelines

Your paragraphs should be well-written in complete sentences. If your paper is hard to understand due to poor grammar, then it will be hard for me to give you a good grade. Therefore it must also be reasonably grammatically correct. Your paper should include things which are interesting, in particular, you should write something you would want to read. Further, your paper is about your topic, not simply what you think about your topic. In other words, first person sentences are unnecessary. While appropriate for the proposal, they are not appropriate for the final paper. Also general discussion on how mathematics is important is unnecessary. For the purposes of this project, this is taken as a given, and each sentence you write should pertain directly, specifically to your topic.

Plagiarism

Plagiarism is strictly prohibited and can result in expulsion. Do not do it, just say "no." As a consequence, you must have a bibliography, citing your sources of information. The more sources there are for a particular piece of information, the more believable it is. You may use Wikipedia as a source, however if your paper consists merely of facts available on Wikipedia your grade will suffer.

¹My email address is dblair@gc.cuny.edu

Grading

This assignment is worth five points total. Each paragraph (**Biography**, **History** and **Mathematical Contribution**) will be worth a point. Overall, grammar is worth a point. This is a draft, so a few errors are unavoidable. If there are too many then I will not award this point. Lastly, one point will be based on how closely I feel you followed these directions. If you have a question about these instructions then you should ask for clarification.

Biography

If your topic is a person, write about the early life of that person. Family history, anecdotes, and quotes are appropriate for this section. You should be as detailed as possible and attempt to include information that is not widely known. For example, it is widely known that Euler went blind later in life, but it is not as widely known at the beginning of his career he won second place in a competition about efficient design of masts for ships. If your topic is a problem, explain how the problem became known in the first place. For instance, the Riemann hypothesis is now an important problem in its own right, but it started as an attempt to solve a problem about prime numbers.

History

You will need a one paragraph discussion on history of the subject you chose. This is distinct from the **Biography** section in that it should discuss the work of your topic. If your topic is a person, this is where you should discuss how their career progressed. In particular, the fact that Cardano was Italian would appear in the **Biography** section, while the fact that he first published the solution to the general cubic equation would be in the **History** section. If your topic is a problem, you should discuss attempts at its solution. For something like the Four Color Theorem, you would need to describe how knowledge about the problem progressed from its inception to its solution.

Mathematical Contribution

This may be one of the most difficult sections in your paper. You should discuss the specific mathematical accomplishments or advances related to your topic. For instance, if you picked Emmy Noether and do not provide a short discussion of Noetherian Rings, your grade will suffer. For a problem such as the Poincaré conjecture, you should explain how it spurred the development of topology.

Once you submit your draft I will give you suggestions on how to improve it. Good luck!