# The Title Goes Here with Each Initial Letter Capitalized

**Author**

University, City, Country,    e-mail

**Abstract:**
Each paper must include an abstract. The abstract is like the trailer of a movie. Harum trium sententiarum nulli prorsus assentior. Nec enim illa prima vera est, ut, quem ad modum in se quisque sit, sic in amicum sit animatus. Quam multa enim, quae nostra causa numquam faceremus, facimus causa amicorum! precari ab indigno, supplicare, tum acerbius in aliquem invehi insectarique vehementius, quae in nostris rebus non satis honeste, in amicorum fiunt honestissime; multaeque res sunt in quibus de suis commodis viri boni multa detrahunt detrahique patiuntur, ut iis amici potius quam ipsi fruantur.

**Keywords**: Keyword one, keyword two, keyword three.

# 1    Introduction

The introduction is where readers settle into the story, and often make the final decision about reading the whole paper. Start strong; dont waste words or time. Your readers have just read your title and abstract, and they have gained a general idea of your subject and treatment. However, they are probably still wondering what exactly your subject is and how youll present it. A strong introduction answers these questions with clarity and precision.

Introduction and problem statement are important parts of any mathematics paper. An introduction should provide an overview of the topic and establish the purpose of the paper. It should also provide any necessary background information, explain key terms and concepts, and identify any assumptions made in the paper. In addition, an introduction should provide a roadmap of the paper, outlining the main points that will be discussed in the body of the paper.

A problem statement is a statement that identifies a problem, its causes, and potential solutions. It should provide a clear statement of the issue,

explain why the issue is important, and outline any potential solutions that could be implemented. Problem statements should also include any necessary assumptions, as well as any constraints or limitations that will affect the solution.

When writing both the introduction and the problem statement, it is important to be concise and to focus on the main points. It is also important to avoid using jargon and to make sure that any terms and concepts are clearly explained. Finally, it is important to ensure that the introduction and problem statement are consistent with the rest of the paper, as well as any research that has already been conducted on the topic.

## 2   Literature Review

Writing a literature review in mathematics can be a challenging task. Firstly, it is important to identify the main sources of information related to the topic. This can include books, journal articles, conference papers, and other published sources. Once the sources have been identified, it is important to read through them and assess their relevance to the topic. It is helpful to identify common themes and ideas in the sources and to organize the literature review according to these themes. The literature review should also include a discussion of the methodology used in the sources and any limitations or strengths of the research. Finally, the literature review should include a conclusion that summarizes the main points of the discussion and suggests areas for future research. Writing a literature review in mathematics is a process of critical analysis and synthesis of existing knowledge on a topic, so it is important to use critical thinking skills when carrying out the review. By considering the sources critically and objectively, it is possible to create a comprehensive and well-structured literature review that can be used to enhance understanding of the topic.

## 3   Another section

The body discusses the various aspects of the subject individually. Materials and Methods : displaying and referring to mathematical formulas; notation; definitions.

In writing the body, your hardest job is developing a strategy for parcelling out the information. Every paper requires its own strategy, which must be worked out by trial and error. There are, however, a few guidelines. First, present the material in small digestible portions. Second, beware of

jumping haphazardly from one detail to another. Third, if possible, follow a sequential path through the subject. The materials and methods used to prove theorems in mathematics are based on the application of deductive reasoning. Deductive reasoning involves the use of logical thought processes to arrive at a conclusion based on a set of accepted facts. In mathematics, a theorem is an accepted statement or formula which is assumed to be true. To prove a theorem, one must use deductive reasoning to show that the theorem is true based on the accepted facts. This is done by demonstrating that if the accepted facts are true, then the theorem must also be true.

The first step in proving a theorem is to establish a set of accepted facts, which are known as axioms. These axioms are used as the basis for the proof. Next, the proof must be constructed by using a series of logical steps to demonstrate that if the axioms are true, then the theorem must also be true. This usually involves the use of logical statements, such as modus ponens and modus tollens, as well as various rules of inference.

In addition to the use of deductive reasoning, numerous other methods are also used to prove theorems in mathematics. These include proof by contradiction, proof by induction, and proof by exhaustion. Each of these methods involve the use of certain strategies to demonstrate the truth of a theorem. In proof by contradiction, one assumes a statement is false and then works to show that it must be true. In proof by induction, one proves a statement is true for a base case and then uses mathematical induction to show that it is true for all cases. Finally, proof by exhaustion involves showing that a statement is true by considering all possible cases.

## 4    Results and Discussion

Writing results and discussing the future work in mathematics is a challenging yet rewarding task. It requires a deep understanding of mathematical concepts as well as a strong ability to synthesize and explain complex ideas. To successfully complete this task, one must first have a clear understanding of the research and the results that have been obtained. Once this is understood, the researcher can then begin to discuss the implications of the results and the implications for future work.

When writing results and discussing the future work in mathematics, it is important to make sure that the results are presented in a clear, concise, and organized manner. This involves creating an outline of the research and the results, detailing the methods and techniques used, and providing an explanation of the results and their implications. Additionally, it is impor-

tant to make sure to provide a discussion of the implications of the results and their implications for future work. This should include an analysis of the results and how they can be applied to the current research or to future research.

It is also important to consider how the results can be used to further broaden our understanding of the mathematics being studied. This may involve considering any potential applications of the results and how they can contribute to the advancement of the field. Additionally, it is important to think of any potential ways in which the results could be modified or adapted to better fit the needs of the current research. It is also important to consider the implications of the results for the future of mathematics and how the results may inform the development of new techniques and approaches.

# References

[1]  A. Mathematician, *Mathematical language*, Proc. Amer. Math. Soc. 20 (2015), 23-31.

[2]  M.M. Mathematician, *Introduction to Mathematics*, Springer, Berlin, 2000.