## A Review on Complex Number & Its Applications

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## **ABSTRACT**

The reason for this short addendum is to survey the essentials of complex numbers and complex number-crunching, which are utilized all through a large part of the message. Since its origin, complex numbers stay without an appropriate numerical worth for example they can't be assigned a situation on the number line. The paper gives a theory that can give complex numbers a real (numerical) esteem. We review the history of complex numbers and further study the hypothesis for 'iota' value. The examination work explores how an intricate number acts as far as genuine numbers consequently figuring out how to give complex numbers a real worth. In order to assign complex number a real value, the study work examines how well a complex number acts in terms of genuine numbers. We had reviewed complex functions or functions of a complex variable. This study also shows some real-life applications of complex numbers. We looked how these complex numbers is applicable to Fluid dynamics, electrical engineering and some more parts of engineering. We studied how the concept of the complex or imaginary numbers is applicable to Quantum Mechanics and in applied mathematics and relativity. The research focused on elements relevant to signal analysis, electrical engineering, and computer science in order to provide a basic description to several of the fundamental basic concepts of complex number theory. Although being among the most crucial domains in Mathematics, Complex number stand without such simple mathematical representation. Additionally, it exemplifies the importance of Mathematics in Engineering and many field of science excellently.

**Keywords:** Complex Numbers, complex function, application of complex numbers.



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