COMPLEX ANALYSIS, IMAGINARY NUMBERS IN REAL WORLD - SOME IMPORTANT THEOREM AND THEIR PROOFS

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ABSTRACT

This article discusses some introductory ideas associated with complex number More complex the society, the more complex is the need of the mathematical needs. Here we look at the nth roots and solution of the equations $z^n = 1$. Since last four centuries, the complex systems are being studied with increasing intensity as it is widely accepted as mathematical truth, for representation's sake or by choice. As more abstract proof evolved, it gave mathematicians confidence to continually develop the techniques to solve the complex system. Today, the system is actually a study of an independent subject called as complex analysis. The advanced studies of the Complex Numbers and the expansion and simplifications of proofs provided new and broad perspectives to approach the many branches of mathematics.

KEYWORDS: *Complex Numbers, Analytical Functions, Series, Sequence, Convergence, Residues*