

# EDITORIAL

Mathematics is a study of gravity (number), structure, space and change. The present issue is third in the series on the completion of 50 years of the Journal. We have included the articles from various disciplines of mathematics, which will help imparting knowledge, skills, values, etc. in mathematics among the young readers.

In the article, "Srinivasa Ramanujan..." the author discusses the contribution made in the field of mathematics by Ramanujan who was a genius with natural talent and had an unbelievable intuition for mathematical results. His great power of concentration ranked him as the greatest mathematician of all times.

The series of the three research articles– Magic Squares-I, Magic Squares-II and Magic Squares-III is an amusing read in which the author talks about the rules for development of magic squares in a very interesting way.

"Learning through Riddles" is an interesting article in which the author proves some of the mathematical riddles. And the article, "The Mysterious Infinity" discusses the concept of endlessness of the number, i.e., infinity.

The article, "Danger of Improper Use of Mathematical Results, Formulas and Symbols: Algebra" shows that mathematics is not a subject of mere memorisation and it needs a lot of thinking power and a very serious study, by listing the examples like law of indices, inequations, modulus sign, logarithm, binominal expansion, cancellation of a common factor from an equation, determinants, which may arise many

fallacious results due to wrong use of formulas, results, etc. in algebra.

In the article, "Danger of Improper Use of Mathematical Results, Formulas and Symbols: Limit (Calculus)" the author discusses some points which may cause false results. The error may occur due to limit of the sum of functions, product of functions and negligence of symbols.

The article, "Danger of Improper Use of Mathematical Results, Formulas and Symbols: Integral (Calculus)" reviews some of the errors which may lead to false results in calculus. These errors may occur due to: the fundamental theorem of integral calculus; the neglect of the sign of an expression under a square root; making no distinction between proper and improper integrals; making the proper integral improper by some operation; improper substitution in definite integrals.

In the article, "Danger of Improper Use of Mathematical Results, Formulas And Symbols: Trigonometry", the author discusses the examples in trigonometry, equalisation of arguments in trigonometry, choosing the scale in drawing graphs of trigonometric functions, restrictions involved in inverse trigonometric functions, which may lead to many false results due to wrong use of formulae.

Pythagoras was perhaps the first to find a proof of the theorem considering the areas of the square on the sides of a right-angle triangle. In the article "Experimenting with

Pythagoras Theorem" the author discusses about the theorem and the expansion of it.

The article, "Exploring Mathematics through Origami" describes the general principle of mathematics that is involved in creation of shapes through folding of paper. These principles can be easily explained through folding of a square sheet of paper. Thus, difficult concepts can be explained to students using their imagination and creativity.

The review article, "The Principle and the Method of Finding Out the Cube Root of any Number" has

also been added in which the researcher explains the method to find the cube root of any number by the method of division. The advantage of this method is that it enables to find out the cube root of any number up to the desired decimal places.

We sincerely hope that our readers would find the articles interesting and educative. Your valuable suggestions, observations and comments are always a source of inspiration which guide us to bring further improvement in the quality of the journal.