SHUBHAM MORE NUMBERS WITH UNIQIE CHARACTERISTICS

1.Shubham Shyamrao More 2.Rajesh Tukaram Jondhale 3.Shourya S. Meshram 4.Sagar U. Sonawane

Civil Engineering Department

Government College of Engineeering, Jalgaon, Maharashtra, India.

ABSTRACT-The main objective of finding these numbers with their special characteristics is to give them special identification. The source of finding these numbers got from Hardy Ramanujan's number and Harshad numbers. The study will give the new idea about the numbers to the world. In this paper I found the lowest number which is sum of the three non negative number's square in two different ways. In this paper I found three numbers in sequence with above mentioned characteristics.

I.Introduction

RAMANUJAN HARDY NUMBER

The history of S. Ramanujan is well-known in the literature. There are so many sites. Besides from his excellent work on mathematics, the Taxicab number 1729 is famous due to his instantaneous combinations with minimum cube $1729=1^3+12^3=9^3+10^3$ .Numbers that are the smallest number that can be expressed as the sum of two cubes in 2 distinct ways.

HARSHAD NUMBER

In recreational mathematics, a harshad number (or Niven number) in a given number base, is an integer that is divisible by the sum of its digits when written in that base. Harshad numbers in base *n* are also known as *n*-harshad (or *n*-Niven) numbers. Harshad numbers were defined by D. R. Kaprekar, a mathematician from India. The word "harshad" comes from the Sanskrit *harṣa* (joy) + *da* (give), meaning joy-giver. The term "Niven number" arose from a paper delivered by Ivan M. Niven at a conference on number theory in 1977.

Eg. $\frac{10}{1+0} = 10$

MY STUDY

The is about exploring the lowest positive number which is the sum of square of three different positive numbers in which can be expressed in two different ways.

1.$\mathbf{101=9^2+2^2+4^2}$

$\mathbf{=6^2+8^2+1^2}$

2.$\mathbf{194=9^2+8^2+7^2}$

$\mathbf{=12^2+7^2+1^2}$

3.$\mathbf{701=19^2+12^2+14^2}$

$=16^2+18^2+11^2$

And so on.

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