

# Ramanujan Magic Square

by Manjil Saikia - Thursday, April 12, 2012

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In recreational mathematics, a **magic square** of order  $n$  is an arrangement of  $n^2$  numbers, usually distinct integers, in a square, such that the  $n$  numbers in all rows, all columns, and both diagonals sum to the same constant. A **normal** magic square contains the integers from 1 to  $n^2$ . The term "magic square" is also sometimes used to refer to any of various types of word square. Below we present to you an unique magic square contributed by Mr. T. R. Jothilingam and his sons. He is a Station Master in Southern Railways, in Kudal Nagar, Madurai, in South India. He graduated in Maths in 1974. He also maintains the website Jolly Maths, which has many such interesting things.

## Ramanujan Biography Magic Square --- A trial version.

G.Total 139		G.Total 364		G.Total 499		G.Total 640		
1 3 9	2 2 5	1 3 5	1 4 1					
Ramanujan Born	Ram t	Passed primar y	Joins in Town	Studied Loney's				
	primary school	In fir st class	High School	Part II Trigonomet ry	Janaki Born	Grand Total		
1 2	9 2	9 8	19 0	3	640			
5 0	6 7	1 0	64 9	5 0	640			

2 3	4 2	2 41 60 0	1 2	640
5 4	2 4	7 11 66	7 6	640
9 2	2 5	9 19 0 8	3	640
1 1 9	6 0	2 60 20 7	5 0	640
4	7	8 40 65	1 7	640
1 0	4 7	2 16 50	7 1	640
2 2	9 8	6 70 69 0	3	640
3 5	1 0	4 54 75 0	5 8	640
7 0	2 0	4 50 70 4	2 3	640
8	7	8 55 15 5	5 7	640
3 9	3	3 18 99	5 0	640

1 6	5 6	5 0	15 16	4 0	640
4 0	1 0	1 0	66 22	3 3	640
4 6	7 2	7 8	42 4	9 4	640
6 4 0	6 4 0	6 4 0	64 0 0	6 4 0	102 40

## ***RAMANUJAN BIOGRAPHY MAGIC SQUARE***

### **Legend of the Ramanujan Biography Magic Square**

From Top left towards right the important dates in the life of Ramanujan was taken in double digits representing either the date of the Month or month or the first or second part of the year. Thus his date of birth 22-12-1887 is taken in four separate squares as 22121887.

We have formed TWO SEPARATE 100 X 100 Ramanujan Biography Magic squares with all the important dates, years in the life of Mr. Ramanujan from his birth to till his demise and afterwards also. All the 100 squares of two digits will have a total 2183 and 2179.

From Top left towards right onwards or from top to bottom onwards the magic squares will be of orders 4 x 4 , 8 x 8, 12 x 12, 16 x 16, 20 x 20, and then in increased orders of 25 x25, 30 x 30, 36 x 36, 42 x 42, 49 x 49, 56 x 56, 64 x 64, 72 x 72, 81 x 81, 90 x 90, and finally 100 x 100

Thus the total 100 x 100 Magic square will contain the following small individual magic squares of sizes noted against as below:

4 x 4 Magic squares 25 25 ( 4 x 4 ) = 400 squares

5 x 5 Magic squares 20 20 ( 5 x 5 ) = 500 squares

6 x 6 Magic squares 24 24 ( 6 x 6 ) = 864 squares

7 x 7 Magic squares 28 28 ( 7 x 7 ) = 1372 squares

**8 x 8 Magic squares 32 32 ( 8 x 8 ) = 2048 squares**

**9 x 9 Magic squares 36 36 ( 9 x 9 ) = 2916 squares**

**10 x 10 Magic squares 19 19 (10 x 10 ) = 1900 squares**

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**Total 184 (Different sized squares) 10,000 Squares**

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**WE DEFINITELY HOPE IT IS A UNIQUE IDEA AND WE THANK *THE ALMIGHTY FOR GIVING US THE IDEA AND FOR HIS KINDNESS TO COMPLETE IT SUCCESSFULLY.***

**Concept,Design and Developedby**

**T.R. Jothilingam, B.Sc., Station Master, KUDAL NAGAR, S.Rly., Madurai,Tamil Nadu, INDIA.  
Cell : +91 09442810486**

**T. J. Ramnath Babu, Indian Institute of Science, Bangalore, India.**

**T. J. Raghunath Babu, Indian Institute of Management, Ahmedabad, India.**

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