## SRINIVASA RAMANUJAN



## AND HIS MAGIC SQUARE

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

This square looks like any other normal magic square. But this is
formed by great mathematician of our country - Srinivasa Ramanujan.

What is so great in it?

## RAMANUJAN'S MAGIC SQUARE

Sum of numbers of

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 | any row is 139 .

What is so great in it.?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## Sum of numbers of any column is also 139. <br> Oh, this will be there in any magic square.

What is so great in it..?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## Sum of numbers of any diagonal is also 139. <br> Oh, this also will be there in any magic square. <br> What is so great in it...?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## Sum of corner numbers is also 139.

Interesting?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

Look at these possibilities. Sum of identical coloured boxes is also 139.<br>Interesting..?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

Look at these possibilities. Sum of identical coloured boxes is also 139.<br>Interesting..?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## Look at these central squares.

Interesting...?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## Can you try these combinations?

Interesting.....?

## RAMANUJAN'S MAGIC SQUARE

Try these<br>combinations also?<br>Interesting......?

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## NOW <br> LETS FACE THE <br> CLIMAX

## RAMANUJAN'S MAGIC SQUARE

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

Do you know date of
birth of Srinivasa
Ramanujan?

## RAMANUJAN'S MAGIC SQUARE

It is 22 ${ }^{\text {nd }}$ Dec 1887.

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

## RAMANUJAN'S MAGIC SQUARE

It is $22^{\text {nd }}$ Dec 1887.

| 22 | 12 | 18 | 87 |
| :---: | :---: | :---: | :---: |
| 88 | 17 | 9 | 25 |
| 10 | 24 | 89 | 16 |
| 19 | 86 | 23 | 11 |

Yes. It is 22.12.1887

BE A PROUD INDIAN

