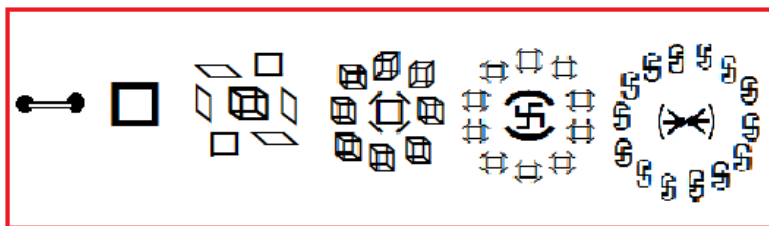


## VEDIC MATHEMATICS

&

## MODERN MATHEMATICS

### SATHAPATYA MEASURING ROD



(HYPER CUBES 1 TO 6)

## Consolidated Steps of learning and teaching of Vedic mathematics, Science & Technology

### STEP – 13

#### Dimensional order

1. Thirteen learning and teaching step of Vedic mathematics, Science & Technology is learn about the dimensional order
2. Linear order means 1-Space in the role of dimension of 3-Space.
3. Cube as hyper cube-3 is the set up of linear order body set up of 31 components.
4. Spatial order is 2-Space in the role of dimension of 4-Space.
5. Number 31 accepts re-organization as  $3 \times 10^1 + 1 \times 10^0$
6. This organization with and along 10 place value format brings to focus the placement at unit value place being parallel to dimensional order value (1) while the placement at the next, 10 place value being 3 is parallel to the value of domain (3-Space) as a three dimensional domain.
7. Hyper cube-4 is the spatial order body set up
8. The number 42 accepts re-organization as  $4 \times 10^1 + 2 \times 10^0$  as a value organization of format parallel to the set up of value 2 as of dimensional order and value 4 as parallel to the value of domain of spatial order.
9. Likewise number 53 is of format parallel to 3-Space in the role of dimension and 5-Space in the role of domain.
10. One may have a pause here and take note that  $42 - 31 = 11$  and  $53 - 42 = 11$
11. With it the sequential organization for the dimensional orders would lead us to the parallel numbers sequence (31, 42, 53, 64, ---)

12. It would also permit us to have extension towards other side as (-46, -35, -24, -13, -2, 9, 20, 31)
13. One may have a pause here and take note that the numbers range (-46, -35, -24, -13, -2, 9, 20, 31, 42, 53, 64) is parallel to the dimensional orders range (-6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4)
14. Let us further have a pause here and to visit the following tabulation.

O	N	Re-organization Of number
0	20	$2 \times (0 + 1 + 2 + 3 + 4) + 0$
1	31	$2 \times (1 + 2 + 3 + 4 + 5) + 1$
2	42	$2 \times (2 + 3 + 4 + 5 + 6) + 2$
3	53	$2 \times (3 + 4 + 5 + 6 + 7) + 3$
4	64	$2 \times (4 + 5 + 6 + 7 + 8) + 4$

15. The above table can be extended on both sides.
16. Let us have a pause and have a visit to the following tabulation

O	N	Re-organization Of number
-6	-46	$2 \times (-6 -5 -4 -3 -2) -6$
-5	-35	$2 \times (-5 -4 -3 -2 -1) -5$
-4	-24	$2 \times (-4 -3 -2 -1 -0) -4$
-3	-13	$2 \times (-3 -2 -1 -0 +1) -3$
-2	-2	$2 \times (-2 -1 -0 +1 +2) -2$
-1	9	$2 \times (-1 -0 +1 +2 +3) -1$

17. Let us further have a pause here and take note that the above organization of values formats of dimensional orders is of features of five fold transcendence ranges as of dimensional orders as half dimension set up together with value of the dimensional order itself.
18. Illustratively in case of linear dimensional order, the dimensional range of five steps is of value  $(1 + 2 + 3 + 4 + 5) = 15$ .
19. The double of the above value comes to be  $2 \times 15 = 30$ .

20. The addition of dimensional value (1) to the above value takes us to  $30 + 1 = 31$ , which is the value parallel to the value of the number 31, which is parallel to the format of linear order body set up.
21. The above feature brings us face to face with TCV (स्वर) = 15.
22. It further brings us parallel to (अ) the first vowel leading to the transcendence range (1, 2, 3, 4, 5) as linear order half dimension set up.
23. One shall further have a pause here and take note that the script format (अ) is a vertically downward line within the lower half of the vertical plane.
24. A step ahead, the second vowel (इ) and the spatial order shall be taking us to spatial order 5 steps long range (2, 3, 4, 5, 6) with summation value 20 and double of it as  $2 \times 20 = 40$  together with the dimensional order value (2) will make out  $40 + 2 = 42$ , a value parallel to spatial order body set up.
25. Likewise one can chase other higher, as well as lower dimensional order set ups.

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