**Vedic Mathematics, Science & Technology
Teacher Course**

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'1 AS 2 & 2 AS 1'

This day the course focus is upon '1 as 2 & 2 as 1'. It four folds aspects being taken up are as follows:

109. 1 as 2 and 2 as 1
110. Internal structure of 3-space domain
111. Dynamic state domain fold
112. Shift from linear order

The values being covered are to be taught as lessons numbers 109 to 112 to the students of 4-space Vedic Mathematics, Science & Technology.

LESSON-109
'1 AS 2' & '2 AS 1'

1. Sequential dimensional spaces have sequential unit.
2. 3-space is a linear order space and it has '1 as 1' being its unit.
3. 4-space is a spatial order space and it has a pair of unit '2 as 1 and 1 as 2', which together, in the context of linear order set up, lead to '1/2' as a working unit.
4. One may have a pause here and to take note that it brings to focus that with points / zero space bodies, as first generation unit, lead to lines as 1-space bodies as

next generic units as gap unit of the points, counts, sequences.

5. The insertion of points at the middle placements of the gets off point count, will result into a 3 point fixation for the pair of counts as well as the gaps and their by there would be the attainment of linear order continue.

6. One may have a pause here and to take note that one space has 3 geometries range and parallel to it, there are 3 versions of hyper cube 1. In the context, it would also be relevant to take note that the above organization arrangement coming out with insertion of a point in the gap in between the pair of point shall be making the middle of the gaps as flushating middle point.

7. Further as per, this arrangement, the set up of a pair of point and gaps in between, as a set up of triple points will make the set up of a pair part of which the first part will be the would be of a reach from first point up till the middle point, the second part will be of a reach from middle point to the second point.

8. One may further have a pause here and to take note that each of the emerging pair of parts, in itself becomes a triple set of a pair of points and gaps in between and same as well will leads us to a pair of sub-sub part of each part.

9. The middle sub-sub part of both the part together will make a set up equal to one complete part which make be designated as third part.

10. From 3 versions of a closed interval 'hyper cube 1/ 1-space body', we have reached a set up of a pair of part with 3rd part superimposed at middle making it a set up of 3 parts.

11. This a pair of situated of 3 versions of a closed interval and of 3 part with 3rd part superimposed middle at the closed interval, deserve to be comprehended well for its chase while going to be a shift from the set up of hyper cube 1 (closed interval to the second set up of a square).

12. Square accepts organization as set up of quadruple, quarter square.

13. This organization of quadruple quarter square accepts superimposition of another quarter at the middle and their by becomes an organization arrangement of five quarters for hyper cube 2.

14. One may have a pause here and to take note that hyper cube '1' has an organization arrangement of 3 part permits sequential transition to the organization arrangement five quarter set up of hyper cube 2.

15. One may further have a pause here and to take note that a step head, the organization arrangement of hyper cube 3 comes to be a set up of 9 octaves with ninth octave superimposed upon superimposed at the middle of the set up of 8 octaves of cube / hyper cube 3.

16. One may have a pause here and to take note that sequentially we are transiting from '1 as 1' unit set up of liner order 3 space to '2 as 1' & '1 as 2' pair of unit of spatial order of 4-space leading to (½) as its working unit. And a step head, solid order makes available a set of 4 units (3 as 1 and 1 as 3), further (3 as 2 and 2 as 3).

17. One may have a pause here and to take note that these four units has a paired pairs, as a pair of part shall be inherently having acceptation for the third part in the form of ' 1 as 2 and 2 as 1'.

18. With this, '1/3' will emerge the working unit.

19. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of *trans* and to fully glimpse and imbibe the format features values of this sequential organization arrangement of hyper cube 1, 2 and 3 together making a system.

20. To appreciate emerging values of this system let us have a fresh visit to the first counts (1, 2, 3, 4, 5, 6 …) and the second gaps generic counts : (1, 3/2, 2, 5/2, 3, 7/2, 4 …).

21. The spatial order reach of the gaps counts generic (1, 3/2, 2, 5/2, 3, 7/2, 4 …) shall be leading us to emerging value sequence (2, 3, 4, 5, 6, 7, 8 …).

22. It would be blissful to compare the pair of values sequences:
    (I)   (1, 2, 3, 4, 5, 6 …)
    (II)   (2, 3, 4, 5, 6, 7 …)

23. It would be a blissful to note that linear order values sequence begins with values 1 and sequentially progress as (1, 2, 3, 4 …).

24. While the spatial order values sequence begins with 2 and the same sequentially progresses has (2, 3, 4, 5, 6 …).

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LESSON-110

INTERNAL STRUCTURE OF 3-SPACE DOMAIN

25. The internal structure of 3-space domain is the net sum up of the restrictive contribution of dimension fold, boundary fold and of the origin fold of hyper cube 3.

26. Dimension fold of hyper cube 3 is manifesting a linear order dimensional frame of 3 linear dimensions.

27. Boundary of hyper cube 3 is manifesting an enveloping frame for 3-space domain has a set up of 6 surface plate / 6 spatial components.

28. Origin fold of hyper cube 3 is a spatial order creative space and same permits two fold transcendence.

29. Linear order of 3-space domain, transcendence through the spatial order of origin folds and has a reach up till solid order base.

30. As a reverse process, the solid orders of base ascend up ward through the spatial order origin (4-space as origin) and it gets superimposed upon the linear order of the domain fold.

31. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of *trans* and to glimpse and imbibe the emerging organization formats features values of domain fold.

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LESSON-111

DYNAMIC STATE DOMAIN FOLD

32. To appreciate dynamic state 3-space domain in its dynamic state first of all it is to be appreciated has to how its internal structural permits it to remain and integrated units.

33. Let us have a revisit to the internal structural set up of a cube (hyper cube 3).

34. 8 corner points get paired has quadruple pairs of end points of quadruple internal diagonals of cube.

35. In each of the corner points of the cube is embedded a 3 dimensional frame of half dimensions of inward orientations.
36. Further as that, for the pair of such 3 dimensional frame embedded in the end point of a diagonal translate availing diagonal has a translation path.
37. Let us chase translation of a pair of 3 dimensional frame translation inward and with their reach at the centre of the cube, the same getting synthesized has a 3 dimensional frame of full dimensions.
38. One may have a pause here and to take note that, this way, all the eight 3 dimensional frame of half dimensions gets synthesized as quadruple as 3 dimensional frame of full dimensions.
39. These quadruple 3 dimensional frame together with the 3 dimensional frame all ready there with, its origin and the centre of the cube, makes a set up of five 3 dimensional frame of full dimensions.
40. One may further have a pause here and to take note that the availability of set up of 5 solid dimensional frame is parallel to dimensional frame of 5-space of a solid dimensional order and same bring us face to face with the feature values being there in the internal structure of set up of the cube which makes it an integrated entity and same to play the role of a solid dimension of transcendental domain (5-space).
41. With it, the dynamic state for the 3-space domain, as such becomes of a format feature value $(1+3) + (1 \times 3) + 1 = 7$.
42. This value 7 of the dynamic state of 3-space domain is there toward single linear dimension of cube.

43. That way the total dynamic value of 3-space domain towards all the 3 linear dimensions comes to be 3x7 = 21.

44. As this dynamic state on its creation and reach as dimension of transcendental domain (5-space), it shall be reaching a value 21+5 26.

45. One may have a pause here and to take note that 3-space as dimension create 5-space with 6-space as origin.

46. The reach up till 6-space along the Sathapatya measuring rod is of a reach steps (1+2+3+4+5+6) = 21.

47. Further as that to be through the orb of sun (6-space), which is of a transcendental order unit state, as such to be through orb of the sun it shall be making a reach of value 21+5 = 26.

48. One may have a pause here and to take note that the reach up till the sun is a 6 sequential progressive steps of values (1, 2, 3, 4, 5, 6).

49. Then the reach through the sun for reach other side of the sun will be a value step of value 21+5 = 26.

50. And hence fourth, there would be a sequential increase of value 5, 4, 3, 2, 1 respectively.

51. This shall be making a complete range of step up till the sun and back from the other side of the sun as a range of 12 steps long coverage as of values range (1, 2, 3, 4, 5, 6, 5, 5, 4, 3, 2, 1) of summation value 41 parallel to the affine state format of a measuring rod synthesized by hyper cubes 1 to 4 within 4-space domain in the role of dimension of 6-space.

52. Further that, as per the progression reach of above step, the value range will comes to be (1, 3, 6, 10, 15, 21, 26, 31, 35, 38, 40, 41).

53. One may have a pause here and to take note that this value 41 has the gaps counts shall be leading us to the value 41+1 = 41.

54. One may further have a pause here and to take note that value 42 is parallel to the synthesis value of a pair of spatial order transcendence ranges (2, 3, 4, 5, 6) and (2, 3, 4, 5, 6) with synthesis glue value 2 parallel to spatial order.

55. One may further have a pause here and to take note that linear order 3-space set up is of value 31 parallel to synthesis of pair of linear order transcendental ranges (1, 2, 3, 4, 5) availing synthesis glue value 1 parallel to linear dimensional order.

56. It would be blissful to take note that transition from linear order 3-space to spatial order 4-space is there because of the static state 3-space domain transition and transformation into a dynamic state of 3-space domain.

57. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of *trans* to glimpse and imbibe the values of above phenomenon and to evaluated the modern mathematical approach and Vedic Mathematical approach to the linear continuum and transition and transformation there from to a spatial dimensional order.

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LESSON-112

A SHIFT FROM LINEAR ORDER

1. A shift from linear order bring within spatial and higher order.
2. Spatial order has the availability of a pair of measure '2 as 1 and 1 as 2'.
3. Because of a pair of measure it simultaneously leads to a pair of progression flow stream.
4. As such, to meet the same system requirement are meet by simultaneously handling a pair of values, say (n and n+1) and parallel to it, to have a simultaneously handling of a pair of dimensional spaces (contents), as well as, there representative regular bodies has a progressing format.
5. A shift from a linear order that way amounts to a shift from a linear dimensional order system to a simultaneous system for handling spatial and solid orders at a time.
6. This gives rise to a set up of hyper cube 2 and hyper cube 3 to provide a combined processing format.
7. One may have a pause here and to take note that hyper cube 3 accepts 2-space in the role of boundary and 3-space in the role of domain.
8. As such, the boundary fold and domain fold would be available has a simultaneously available a combined processing format.

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