

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

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DIMENSIONAL SYNTHESIS VALUES TABLE

This day the course focus is upon 'Dimensional Synthesis values table'. It four folds aspects being taken up are as follows:

13. Reach at dimensional synthesis values table for all orders
14. Negative dimensional orders and negative numbers of dimensions.
15. General Domain split spectrum
16. Domain split spectrum

The values being covered are to be taught as lessons numbers 13 to 16 to the students of 4-space Vedic Mathematics, Science & Technology.

LESSON-13

**REACH AT DIMENSIONAL SYNTHESIS VALUES
TABLE FOR ALL ORDERS**

					0	-10	-8	6	32	70
					0	-9	-7	6	30	65
					0	-8	-6	6	28	60

					0	-7	-5	6	26	55
					0	-6	-4	6	24	50
					0	-5	-3	6	22	45
					0	-4	-2	6	20	40
					0	-3	-1	6	18	35
					0	-2	0	6	16	30
					0	-1	1	6	14	25
					0	0	2	6	12	20
					0	1	3	6	10	15
					0	2	4	6	8	10
					0	3	5	6	6	5
					0	4	6	6	4	0
					0	5	7	6	2	-5
					0	6	8	6	0	-10
					0	7	9	6	-2	-15
					0	8	10	6	-4	-20
					0	9	11	6	-6	-25
					0	10	12	6	-8	-30

1. Visit the adjoining table.
2. This table is of synthesis values of orders (-10) to (+10).
3. This table is of synthesis values of zero, one, two, three, four and five number of dimensions of dimensional orders of range (-10) to (+10).
4. One shall fully glimpse and to completely imbibe the above dimensional synthesis values.
5. One shall extend the above table for six, seven, eight, nine, ten and higher number of dimensions of range (-N) to (+N) for N equal to (11, 12, 13, 14 ...).
6. One shall comprehend and appreciate the values differences for (0, 1, 2, 3, 4 and 5) numbers of

- dimensions of a pair of consecutive dimensional orders which comes to be of the range (0, -1, -1, 0, 2, 5).
7. The sequential values difference of the values of the range (0, -1, -1, 0, 2, 5) comes to be (-1, 0, 1, 2, 3).
 8. It would be a blissful exercise to extend above differences values ranges for bigger range of dimensional orders $N = (6, 7, 8, 9, 10)$ and so on.
 9. It would be a blissful exercise to extend the above values difference range (-1, 0, 1, 2, 3) on its both sides as (... -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ...) and with its help to complete the above table for negative number of dimensions for synthesis values in respect of all dimensional order, may it be positive, zero or negative.
 10. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.

EXERCISE TO COMPLETE THE ABOVE TABLE FOR NEGATIVE NUMBER OF DIMENSIONS

1. To complete the table for negative number of dimensions, we have to first of all to revisit the sequence of values differences of synthesis of pair of consecutive dimensional order, which comes to be as under for the zero and positive number of dimensions: (0, -1, -1, 0, 2, 5, 9, 14, 20, 27, 35, 44, 55 ...).
2. The sequential progression of values for the above range of values comes to be:
 $[(-1, -0) = -1, (-1)(-1) = 0, (0, (-1) = 1, (2 -0) = 2, (5-2) = 3, (9-5) = 4, (14-9) =5, (20-14) = 6, 27-20) = 7, \dots]$

3. This sequential progression values range comes to be:
(-1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ...)
4. The extension of this sequential progression range takes us to:
(... -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, ...).
5. This sequential progression range, takes us to the following range which accepts the above progression range of values:
(... 27, 20, 14, 9, 5, 2, 0, 1, 1, 0, -1, -1, 0, 2, 5, 9, 14, 20, 27 ...).
6. One may have a pause here and take note that the emerging sequence of differences value range for synthesis of dimensions of a pair of sequential order, as above, shall be amounting to extension of the values for synthesis of negative, zero and positive number of linear dimensions and for spatial dimensions as follows:

LINEAR DIMENSIONAL SYNTHESIS VALUES SEQUENCE

(... -36, -28, -21, -15, -10, 6, -3, -1, 0, 1, 3, 6, 10, 15, 21, 28, 36 ...).

SPATIAL DIMENSIONAL SYNTHESIS VALUES SEQUENCE

(... -16, -14, -12, -10, -8, -6, -4, -2, 0, 2, 4, 6, 8, 10, 12, 14, 16 ...).

7. It would be a blissful exercise to glimpse and imbibe the above format features of dimensional synthesis value sequences of linear and spatial dimensional orders for

negative, zero and positive dimensional order and to complete the following table for negative number of dimensions for all dimensional orders of positive, zero and negative dimensional orders

					0	-10	-8	6	32	70
					0	-9	-7	6	30	65
					0	-8	-6	6	28	60
					0	-7	-5	6	26	55
					0	-6	-4	6	24	50
					0	-5	-3	6	22	45
					0	-4	-2	6	20	40
					0	-3	-1	6	18	35
					0	-2	0	6	16	30
					0	-1	1	6	14	25
					0	0	2	6	12	20
					0	1	3	6	10	15
					0	2	4	6	8	10
					0	3	5	6	6	5
					0	4	6	6	4	0
					0	5	7	6	2	-5
					0	6	8	6	0	-10
					0	7	9	6	-2	-15
					0	8	10	6	-4	-20
					0	9	11	6	-6	-25
					0	10	12	6	-8	-30

8. One shall revisit the above reach of the complete table for whole range of positive, zero and negative dimensional order for positive, zero and negative

number of dimensions and to glimpse and imbibe the zone of non negative synthesis values.

9. It would be a blissful exercise to glimpse and imbibe the zone of negative synthesis values.
10. Still further it would be a very blissful exercise to glimpse and imbibe the zone of zero synthesis values.

UPDATE ONE'S DICTIONARY

1. It would be a blissful exercise to update one's dictionary by adding entries of one's comprehension of negative dimensional order features and values.
2. Further, one shall add entry of one's comprehension of negative number of dimensions and their synthesis values for negative dimensional orders in particular.
3. One shall also add entries regarding the zone of positive dimensional synthesis values in respect of negative dimensional order.
4. Still further, one shall also add entries regarding negative dimensional synthesis values for positive dimensional order.
5. One shall express oneself about one's comprehension and appreciation zero as dimensional synthesis value.



LESSON-14

NEGATIVE DIMENSIONAL ORDERS AND NEGATIVE NUMBERS OF DIMENSIONS

1. Conceptually positive and negative numbers values are measure chase along the positive and negative

orientations format for the domain because of the spatial dimensional order.

2. It is because of the spatial order beginning and end placement at the same 'ment'.
3. For comprehension facility, one may begin moving along circumference from one of its points and one may blissfully reach back at the same point though one may be always moving away from the starting points.
4. This feature and value is no more available while one moves along a straight line to be always away from starting point.
5. It would be a blissful to take note that the pair of orientation format of an interval separates their respective format from (+1) space as domain fold to (-1) space as dimensional fold, and vice versa.
6. A reach from (+1) space as domain (-1) space as dimension is a reach along absolutely different format.
7. As such, negative numbers values have their own mathematics, distinct from the mathematics of positive number of values.
8. To illustrative that let us visit (+3) space and (-3) space.
9. (-3) space takes us to dimension of dimension to dimension of dimensional to +3 space.
10. Accordingly the negative dimensional order and negative number of entities deserve to distinctively comprehended and to be appreciated for their format features and values.
11. The dimensional synthesis phenomenon, as such permits quarter by approach as:
 - i. First quarter to cover the synthesis values for positive dimensional orders for positive numbers of dimensions.

- ii. The second quarter to cover synthesis values of negative dimensional order for positive number of dimensions.
 - iii. Third quarter to cover synthesis values of positive dimensional order for negative number of dimensions, and
 - iv. The fourth quarter negative dimensional order for their negative number of dimensions.
12. This organization as such is as per the organization of a square as a set up of quadruple quarter squares.
13. Further, this takes us to the set up of Swastik, a set up of a dimensional frame for churning at the centre of square / origin of 2-space having by a quarter by quarter churning motion in its both orientations, as along both faces of a surface.
14. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.



ZERO AS ORIENTATION REVERSAL GATE

1. Let us revisit value zero.
2. $(-0) = (0) = (+0)$.
3. The values triple $(-0, 0, +0)$ brings us face to face with the unique role as for reversal of orientation and that way zero becomes the reversal of orientation gate for organization of positive and negative values having synthesized format of uniform progression throughout at every step of reach as $(\dots -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5 \dots)$.

4. This synthetic values format (... -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5 ...) binds the differences value arrange for the synthesis of a pair of consecutive dimensional order, which comes to be:
(... -20, -14, -9, -5, -2, 0, -1, -1, 0, 2, 5, 9, 14, 20 ...).
5. It would be a blissful exercise to chase sequential progression at each step for the values of above range, as these are and the left and right side of value zero as value of zero dimensional order for zero number of dimensions itself being zero.
6. The sequential value range for the values limb of above range (-20, -14, -9, -5, -2, 0) comes to be (-6, -5, -4, -3, -2, -1).
7. Now, let us considered the value range (0, -1, -1, 0, 2, 5, 9, 14, 20 ...).
8. It gives us a sequential progression values range (-1, 0, 1, 2, 3, 4, 5, 6 ...).
9. One may have a pause here and to permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse as to how the values zero for the zero numbers of dimension is playing the role of a gate for reversal of orientation for the reach at the synthetic continuity of unit value progression at each step on either side of value zero.
10. In reference to above range of the above synthesis phenomenon.
11. It would be relevant to take note that the transition from value zero into a values triples (-0, 0, +0) will help on both side to attain the values triple (1, 0, -1) as progression sequence, in its one orientation and by a reversal of it as (-1, 0, 1) for the other orientation.

12. The uniqueness of value zero in value triple range $(-0, 0, +0)$ speak for itself.
13. It would be a blissful enlightenment that Arthrav Samhita, avails the formulation Sunya, only one's (14.2.19) for the value divide of all values; a d-voided state for the void itself.
14. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format features and values.

LESSON-15

GENERAL DOMAIN SPLIT SPECTRUM

1. Domain fold is the third fold of four fold format of hyper cube parallel to the format features and values of Idol of Lord Brahama, the Over Lord of 4-space.
2. Domain fold is manifested space content which gets enveloped within a boundary and same remain integrated in terms of a dimensional frame with origin of dimensional frame having a seat at the seat origin fold within domain fold.
3. Because of split for the boundary fold into **2N** components for (N) space domain, it lead to $(2N+1)$ versions of hyper cube parallel to $(2N+1)$ geometries of (N) space.
4. The $(2N+1)^{th}$ versions of hyper cube N being free of all components of boundary makes origin to be released

with lifting of the origin of the dimensional frame there from.

5. One may have a pause here and take note that with lifting of the origin of the dimensional frame, and release of the origin fold, the dimensions of dimensional frame split into a pairs of dimensions.
6. As a result of there off, domain itself also split, and transcendence of the dimensional order takes place from the seat of origin fold.
7. The transcendence gives a reach up till base fold.
8. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.

LESSON-16

DOMAIN SPLIT SPECTRUM

1. Domain split phenomenon is of reverse feature than that of dimensional synthesis phenomenon.
2. One may have a pause here and to recapitulate that a pair of dimensions of order than (N) space in the role of dimensions synthesis $(N+2)$ space domain.
3. One may have pause here and take note that a pair of dimensions of order (N) , together contribute value $(N+N = 2N)$, however of this $(2N)$ value, value $(N-2)$ gets absorbed in bridging the gap between the pair of free end points of the pair of dimensions, and thereby there remain a net value $(N+2)$ as the value of the domain standing structure like that.

4. As such, as a reverse process $(N+2)$ space domain splits into a pair of domain of (N) space domain and simultaneously, there also happens to be a release $(N-2)$ space domain in the role of dimension of dimension of $(N+2)$ space.
5. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format feature and values.
6. A step head, pair of (N) space domain as well split into 2 pairs of $(N-2)$ space domains, and also there happen to be a release of $(N-4)$ dimensions of dimensions of (N) space.
7. One may have a pause here and take note that, at this stage of split, there emerge, as many as 5 entities / domain of order $(N-2)$ and in addition there would be an availability of a pair of entities / dimension of dimensions of order $(N-4)$.
8. One shall sit comfortably and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse and imbibe the above format here and to revisit the above split steps for $(N+2)$ space domain.
9. First step led us to a pair of entities / domain of n space, and in addition there also has been a release of $(N-2)$ space as dimension of dimensions of $(N+2)$ space.
10. And second step made has been availability of 5 entities / domain $(N-2)$ space, and in addition there being a release of pair of dimension of dimensions of order $(N-4)$
11. Before we proceed further, for complete and full comprehension and appreciation of the above pair of

split phenomenon, let us tabulate the above emerging feature of the domain split phenomenon as follows as expression of domain split spectrum at initial pair of stage there of:

TABLE
DOMAIN SPLIT SPECTRUM

Stage	Domain	Split Entities	Dimension-Dimension
0	N+2	-	-
1	N	2	1
2	N-2	5	2
3			
4			

12. It would be a blissful exercise to sequentially reach at third and fourth stages of domain split spectrum and to update the above table, which shall be of values as follows:

Stage	Domain	Split Entities	Dimension-dimension
0	N+2	-	-
1	N	2	1
2	N-2	5	2
3	N-4	12	5
4	N-6	29	12

13. It would further be a very blissful exercise to chase the domain split spectrum further for its fifth and sixth, seventh and for further steps, and to extend the above

table with appropriate values, which shall be bringing us face to face with the emerging spectrum at different stage as follows:

Stage	Domain	Split Entities	Dimension-Dimension
0	N+2	-	-
1	N	2	1
2	N-2	5	2
3	N-4	12	5
4	N-6	29	12
5	N-8	$2 \times 29 + 12 = 70$	29
6	N-10	$2 \times 70 + 29 = 169$	70
7	N-12	$2 \times 169 + 70 = 408$	169
8	N-14	$2 \times 408 + 169 = 985$	408
9	N-16		
10	N-18		
11	N-20		
12	N-22		

FURTHER BLISSFUL EXERCISE

- One shall visit and revisit above tabulation of domain split spectrum values of spectra at its different stage of split and to comprehend and appreciate the sequential progression of the emerging entities of spectra as domain and as released dimension of dimensions.

15. It would be a blissful exercise to reach at specific tabulation form specific space domains, say $(N+2) = (10, 9, 8 \dots, 11, 12, 13 \dots)$.
16. Here below is reached at domain split spectrum values tabulation for $(N+2) = N$ space domain.

Stage	Domain	Split Entities	Dimension-Dimension
0	10	-	-
1	8	2	1
2	6	5	2
3	4	12	5
4	2	29	12
5	0	$2 \times 29 + 12 = 70$	29
6	-2	$2 \times 70 + 29 = 169$	70
7	-4	$2 \times 169 + 70 = 408$	169
8	-6	$2 \times 408 + 169 = 985$	408



RECAPITULATION

1. One shall sit comfortably and to recapitulate the values glimpse and imbibed during this phase of learning about 'domain split spectrum'.
2. 4-space approach is the approach 2-space in terms of a dimensional frame of 4 spatial dimensions.
3. Space as content gets dimensionalized as per the format features and values of 4 spatial dimensions.
4. The emerging domain fold becomes the expression of so framed space as content, designated as 4-space content of value of expression as domain fold of hyper cube 4.
5. With it, 4-space content becomes basic value reservoir entity of 4-space mathematic science and technology.
6. With it, we can be say that 4-space mathematic, science and technology chases and avails this values reservoir.
7. One may have pause here and take note that like domain fold, other fold as well, namely dimension fold, boundary fold and origin fold of hyper cube 4 to infect or values reservoirs entities of 2-space content, 3-space content and 5-space content respectively, as such 4-space mathematics, science and technologies get intimated gets connected to (2, 3, 5) spaces mathematics, sciences and technologies.

