

Sri – Om
VEDIC MATHEMATICS AWARENESS YEAR

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(Organizers Dr. S. K. Kapoor, Sh. Rakesh Bhatia, Sh. Bhim Sein Khanna,
Sh. Deepak Girdhar, Sh. Gourav Budhiraja)

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		<p>ॐ । गायत्री छन्द । सरसवती मंत्र । महेश्वर सूत्र । गणित सूत्र</p> <p>Om Gyatri Chand, Saraswati Mantra, Maheshwar Sutra, Ganita Sutras</p>
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Vedic Mathematics,
(Sunlight format Mathematics)
Discipline of dimensional Synthesis
Mathematics Course

3

Polygons 4, 5 & 6

1. Regular Polygon (here being referred simply as polygon) constitute a sequential set of formats within plane (2-space).
2. Polygon n is a regular polygon of n sides.
3. The external angles of polygon n are 2π while total angles (internal as well as external angles are $n\pi$)
4. External angles of polygon n are $(n-2)\pi$.
5. This relationship of total angles and internal angles are of ratio format $(n, n-2)$.
6. This relationship $(n, n-2)$ is parallel to (domain, dimension folds relationship).
7. Polygon n is of n sides and it has n vertices.
8. From each vertices flow a pair of sides.
9. This way three vertices stand coordinated.
10. The flow from a given vertices as such shall be having $(n-3)$ internal diagonals flow formats coordinating given vertices with remaining $(n-3)$ vertices
11. As the coordination of given vertices with such $(n-3)$ vertices is to be through the internal surface of polygon, as such these three coordination lines / coordination flow paths through the internal surface, are designated as internal diagonals from each vertices.

12. If sequentially from vertices 1 to vertices n , all the internal diagonals are drawn, then it would sequentially follow that:
 - (i) At first step, the internal diagonals from first vertex shall be $(n-3)$ in number.
 - (ii) And second step as well there would be $n-3$ internal diagonals
 - (iii) And third step from the vertices on the other side of the first vertices, as well there would be $(n-3)$ vertices
 - (iv) However, a step ahead, the contribution would sequentially decrease because of the availability of the previous vertices internal diagonals.
13. Polygon 4 has only 1 internal diagonal from first vertices and 1 internal diagonal from the second vertices, and same leave no scope for contribution of any further contribution of internal diagonals.
14. Both these internal diagonals cross at the center of square / polygon 4 and with it, it can be said that the center stands sealed
15. Polygon 5 (pentagon) has a pair of internal diagonals from each vertex, though because of each internal diagonal coordinating a pair of vertices, as such the total number of internal diagonals construct and internal pentagon (polygon 5) such that the internal surface of internal polygon is not crossed by either internal diagonal of the external pentagon.
16. It is this feature which as such is of the format and features of the center of the polygon 5 being not sealed, as such is of open for flow, from within in to the internal pentagon surface zone.
17. A step ahead, hexagon (polygon 6) leads to situation where internal diagonals construct internal hexagon but three of the internal diagonals cross and flow through the surface of internal hexagon and those also cross and pass through the center of hexagon.
18. This as such, makes out that polygon 4 (square) as a sealed center because of crossing of the internal diagonal at the center.
19. However, in case of polygon 5 (pentagon) the internal diagonals construct internal pentagon and do not cross through the surface of internal pentagon and with it the center remains in open state within surface of internal pentagon.
20. A step ahead, polygon 6, hexagon because of three of its inter diagonals crossing through the center of hexagon, as such outer hexagon as well as inner hexagon remain in sealed center state
21. It is this feature of polygons 4, 5 and 6, with polygons 4 and 6 remaining in sealed state, while polygon 5 remain in open center state.
22. One may have a pause here and permit the transcending mind to continuously remain in prolonged sitting of trans and to glimpse this organization format.
23. Parallel to it one shall revisit number triple (4, 5, 6)
24. Still further one shall revisit domain folds of hyper cubes 4, 5 & 6.

25. Still further one shall revisit the set up of triple space content namely of 4-space, 5-space and 6-space
26. Still further one shall revisit triple space (4-space, 5-space and 6-space)
27. Still further one shall revisit Trimurti / triple deities, namely Lord Brahma, Lord Shiv, Lord Vishnu
28. In this background one shall revisit Triloki setup
29. Here it would be relevant to note that artifices trile (1, 2, 3) is unique and neither of as neither of them is a composite number.
30. However amongst the triple artifices (4, 5, 6) only middle placement number 5 is not composite; it is prime number
31. With it artifice 5 / number 5 / hyper cube 5/ transcendental (5-space) domain / 5-space content are of unique features and format and same deserve to be comprehended well and to be imbibed fully to have through appreciation and same deserve to be fully imbibed to acquire whole for universal virtues of this format which is at the base of organization of Vedic knowledge as single wholesome Discipline of ultimate source reservoir, pure and applied values and all Vedic wisdom and enlightenment.

Surface within pair of faces

32. Within 3-space (and higher spaces), plane / surface as more than one faces.
33. Surface with a pair of faces deserve to be chased.
34. This chase is to be in reference to a plane as a surface with a single phase.
35. Pair of faces deserve to be chased individually for distinctiveness as well as simultaneously, for comparative features, as well as the integrated / combined set up because of a pair of faces.
36. This organized / combined set up of a surface of a pair of faces, deserve to be chased as pair of set ups peeled off from the integrated set up.
37. Surface and its face (s) deserve to be chased distinctively from each other.
38. One may have a pause here and take note that the with it would emerge a pair of faces and surface, that way being three entities (set ups) of distinctive features.
39. Taking that first face faces east and second face faces west at surface having in between placement, it shall be giving us an idea of 0 volume of three different characteristics, parallel to a set up of triple zeros (-0, 0, +0)
40. One may have a pause here and take note that a bend at the middle of above triple, shall be making middle placement 0 as 1 end and pair of opposite orientation values of zero, jointly as the other end of this set up of bend at the middle.
41. Here It also would be relevant to note that a pair of zero order dimensional folds synthesize and yield value (2)
42. Further as that synthetic set up of triple dimension of zero order is '6'

43. This way, in between setup of a pair of faces of a surface, on its chase shall be bringing us face to face with the emergence of structural set ups at the middle placement of triples.
44. Let us further have a pause and take that the eastern face of surface envelops a sphere.
45. Further as that the western face of the surface as well envelops the sphere towards the western side
46. The pair of enveloped spheres of eastern and western placement separated by middle placement surface, is the set up which deserve to be chased.
47. The emerging pair of spheres in terms of single face set up of surfaces is the Phenomenon which deserve to be chased
48. NVF (Ball) = 27 = NVF (Half), deserve to be chased
49. The split up of the universe as pair of hemisphere set ups as well deserve to be chased.
50. A set up of a pair of eyes (eye balls) as well deserve to be chased.
51. Split of one as a pair of halves, split of interval as a pair of intervals, the split up of a surface, split up of solids and hyper solids of all orders deserve to be chased.
52. Point separating two parts of interval, line separating two parts of square, square separating two parts of cube deserve to be chased.
53. Split of boundary of hyper cube into a pair of equal components deserve to be chased.
54. Chase of domain of hyper cube in terms of half boundary deserve to be chased.
55. $2 = 1 + 1$, $1^2 = 1 \times 1$ and synthetic value of pair of linear dimensions $(1, 1) = 2$ deserve to be chased.
56. $4 = 2 + 2 = 2 \times 2 = (-2) \times (-2)$ deserve to be chased.
57. $1 + 2 + 3 = 1 \times 2 \times 3 = (-2) \times (-3)$ deserve to be chased.
58. $2^4 = 4^2$ deserve to be chased
59. $1^3 = 1^2$, $2^3 = 2^2 + 2^2$, $3^3 = 3^2 + 3^2 + 3^2$
60. $4^3 = 4^2 + 4^2 + 4^2 + 4^2$
61. $5^3 = 5^2 + 5^2 + 5^2 + 5^2 + 5^2$
62. 3^3 is parallel to 27 components of set up of cube.
63. $5^3 = 125$ is parallel to the set up of components of cube as 8 sub cubes.
64. 7^3 is parallel to the components of the set up of a cube of 27 sub cubes, and so on.
65. This deserve to be chased

Grids format of n x n format and n x n + 2 formats

66. The grid formats n x n as n^2 grid zones lead to (n-1) x (n-1) grid format of (n-1) square grid zones super imposed upon the grid zones of n x n format, in such

a way that the centers of $n \times n$ grid zones become the vertices of $(n-1) \times (n-1)$ grid.

67. Here it would be relevant to note that the centers of $n \times n$ grid format becomes the vertices of $(n-1) \times (n-1)$ grid.
68. However the internal vertices of $n \times n$ grid becomes the centers of $(n-1) \times (n-1)$ grid.
69. Here it also would be relevant to note that such grid super impositions would be available along both faces of the surface formats of the grids
70. With it the pair of $(n-1) \times (n-1)$ grid format super imposed $n \times n$ grid along its both faces shall be making available with pair of vertices for each internal vertex of the $n \times n$ grid.
71. These triples shall be accepting middle placement for internal vertices of $n \times n$ grid.
72. This organization deserve to be chased parallel to the organization of polygons triples like (polygon 4, 5, 6).

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Dr. Sant Kumar Kapoor