BBS-ISL Matrix Fundamentals:

10 Basic, fundamental rules of the symmetrical BBS-ISL Matrix

- Basic BBS-ISL Rule 1: All numbers (#s) related by the 1–4–9–...PD sequence

- Basic BBS-ISL Rule 2: Every # in the PD sequence is the square of an Axial #.

- Basic BBS-ISL Rule 3: The Odd-Number Summation sequence forms the PD sequence.

- Basic BBS-ISL Rule 4: Every EVEN Inner Grid (IG) # is divisible by 4 & all are present.

- Basic BBS-ISL Rule 5: Every IG# is:
  - A: The difference (Δ) between its two PD-sequence #s. (Note: A=B=C=D, and, E.)
    - Ex: PD 25 - PD9 = 16
  - B: The sum (∑) of the Δs of each of its PD#s between its two PD-sequence #s (as above).
    - Ex: (PD 25 - PD16) + (PD16 - PD9) = 16
  - C: The Δ between the squares of the two Axial #s forming that IG# (as above).
    - Ex: $5^2 - 3^2 = 16$

- Basic BBS-ISL Rule 5: Every IG# is (con'd):
  - D: The product of the Addition & Subtraction of the two Axial #s forming that IG# (as above).
    - Ex: (5 + 3) x (5 - 3) = 16
  - E: The product of the Diagonal Axis # – STEPS from the PD – times the ∑ of Row + Column Axis #s.
    - Ex: 2 x (5 + 3) = 16
  - F: Also, the product of its 2 Axial #s intersected by that IG#'s 90° diagonals.
    - Ex: 2 x 8 = 16

- Basic BBS-ISL Rule 6: Every *ODD IG# is NOT PRIME & all are present.
  - Corollary: NO PRIME #s are present on the *IG.
  - Corollary: NO EVEN, NOT divisible by 4, #s are present on the IG.

    *Excepting the 3–5–7–... ODD #s of the 1st Parallel Diagonal

- Basic BBS-ISL Rule 7: The ODD-Number sequence 1–3–5–7–..., and the 1–4–9–...PD sequence, form the sequential Δ between ALL IG#s.

- Basic BBS-ISL Rule 8: The Δ between #s within the Parallel Diagonals is a constant 2 x its Axial #.

- Basic BBS-ISL Rule 9: The Δ between #s in the Perpendicular Diagonals follow:
  - A: From EVEN PD#s, √PD x 4 starts the sequence & follows x1–x2–x3–x4–....
  - B: From ODD PD#s, √PD x 4 starts the sequence & follows x1–x2–x3–x4–....
  - C: From ODD Perpendicular Diagonals between the EVEN-ODD diagonals (above), the sequence starts with the same value as the Axis number ending the diagonal, the sequence following x1–x3–x5–x7–..

- Basic BBS-ISL Rule 10: Every #, especially the #s in the ONEs Column, informs both smaller and larger Sub-set symmetries (much larger grids required to demonstrate).

BBS-ISL Matrix Inner Grid Golden Rules (IGGR)

5 Basic, fundamental rules of the symmetrical BBS-ISL Matrix Inner Grid

- IGGR 1: The IG is formed of two equal & symmetrical 90°-right, isosceles triangles that are bilaterally symmetrical about the PD – and, infinitely expandable.

- IGGR 2: The 90°-right-triangle – inherent to ALL squares and rectangles by definition – both forms the alternating EVEN-ODD square grid cells within the Matrix, and, is responsible for all major patterns and sequences, thereupon.

- IGGR 3: Subtraction-Addition: Every IG# is simply the Δ between its two PD#s (subtraction), and, the sum (∑) of any IG# + its PD# above = the PD# on the end of that Row (or, Column).

- IGGR 4: Multiplication-Division: Every IG# is simply the product of the two AXIAL #s intersected by the two diagonals – of that said IG# – pointing back to the Axis at a 90° angle (multiplication), and, the dividend of the Axial divisor and quotient (division).

- IGGR 5: The actual # of grid-cell steps – i.e., the actual # of STEPS from a given IG# to another by a strictly horizontal, vertical, or 45° diagonal path – forms a simple, yet often fundamental descriptor to the pattern-sequence templates that inform the more advanced patterns, e.i., Exponentials and especially the Pythagorean Triples (PTs). STEPS are particularly important in the geometric visualizations within the BBS-ISL Matrix (as alluded to in IGGR 2, above).

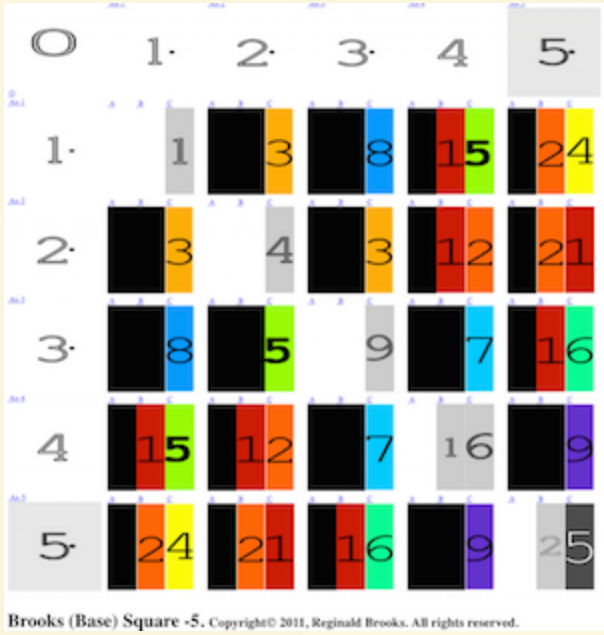
Pythagorean Triples and BBS-ISL Fundamentals (TPISC: The Pythagorean-Inverse Square Connection)

3 Basic, fundamental rules of the symmetrical BBS-ISL Matrix Inner Grid that encompass the PTs.

- TPISC-BBS-ISL Rule 1: Every IG EVEN Squared # is part of a Paired-Factor Set (PFS) that:
  - A: Has reciprical PFS members on the PD vertically above.
  - B: Both PFS members reside on the SAME Row.
  - C: They represent the a^2 and b^2 values of a PT, whose c^2 value is on the PD intersection

- TPISC-BBS-ISL Rule 2: Every PT is found on the BBS-ISL Matrix and can be located by this intersection of EVERY PD (9>) and a Row with PFSs.

- TPISC-BBS-ISL Rule 3: Every PT – including its sides, perimeter, area and proof – can also be found and fully profiled (and, predicted) as r-set, s-,t-set members of the Dickson Method (DM), Expanded Dickson Method (EDM), and the Fully Expanded Dickson Method (FEDM), shown herein.



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