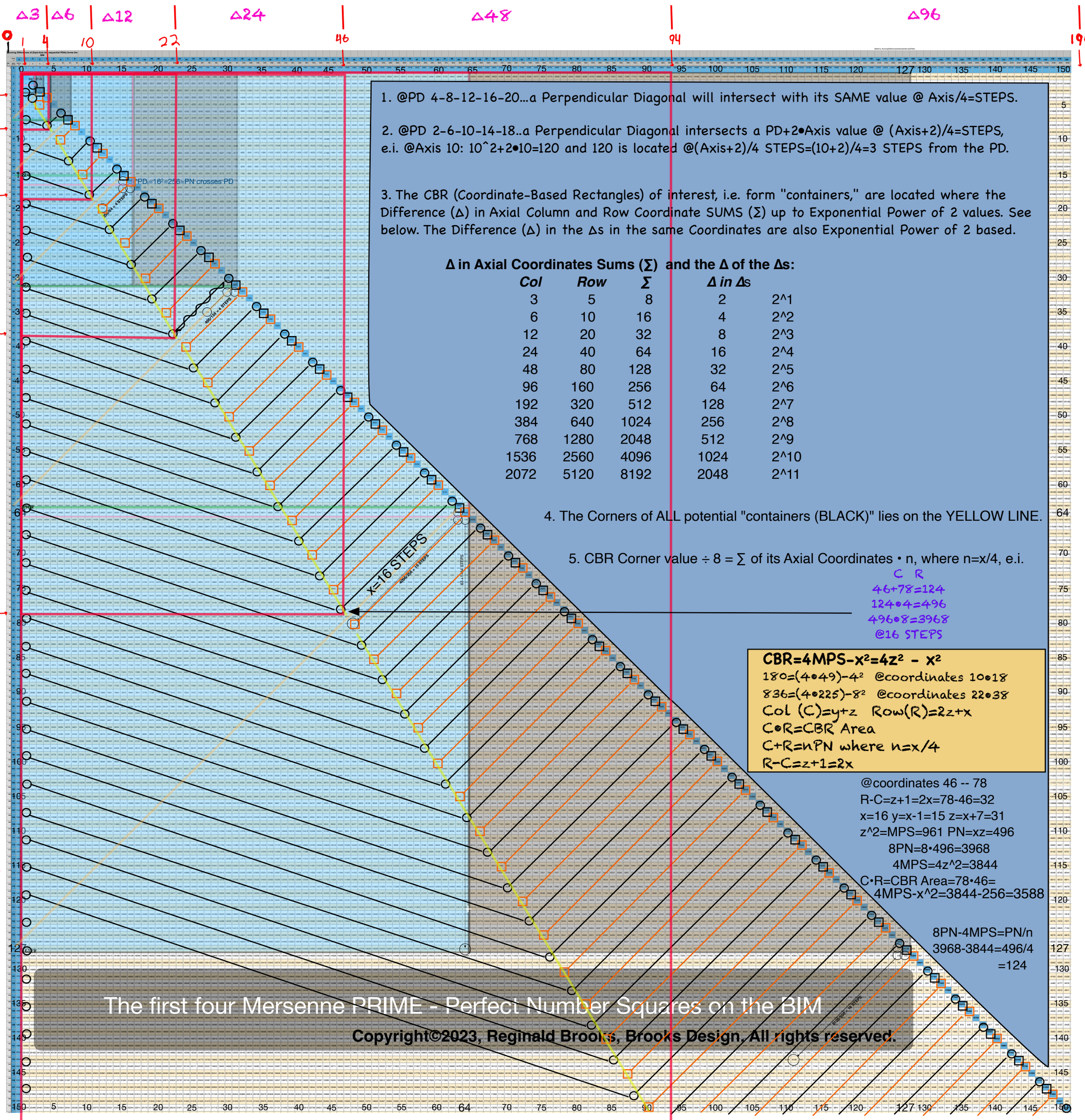
Δ3
Δ6
Δ12
Δ24
Δ48
Δ96
0
1
4
10
22
46
94
190
3
Δ5
8
Δ10
18
Δ20
38
Δ40
78
Δ80
158
PD_n=16²=256=PN crosses PD
y=16 STEPS
1. @PD 4-8-12-16-20...a Perpendicular Diagonal will intersect with its SAME value @ Axis/4=STEPS.
2. @PD 2-6-10-14-18..a Perpendicular Diagonal intersects a PD+2•Axis value @ (Axis+2)/4=STEPS, e.i. @Axis 10: 10^2+2•10=120 and 120 is located @(Axis+2)/4 STEPS=(10+2)/4=3 STEPS from the PD.
3. The CBR (Coordinate-Based Rectangles) of interest, i.e. form "containers," are located where the Difference (Δ) in Axial Column and Row Coordinate SUMS (Σ) up to Exponential Power of 2 values. See below. The Difference (Δ) in the Δs in the same Coordinates are also Exponential Power of 2 based.
Δ in Axial Coordinates Sums (Σ) and the Δ of the Δs:
Col Row Σ Δ in Δs
3 5 8 2 2^1
6 10 16 4 2^2
12 20 32 8 2^3
24 40 64 16 2^4
48 80 128 32 2^5
96 160 256 64 2^6
192 320 512 128 2^7
384 640 1024 256 2^8
768 1280 2048 512 2^9
1536 2560 4096 1024 2^10
2072 5120 8192 2048 2^11
4. The Corners of ALL potential "containers (BLACK)" lies on the YELLOW LINE.
5. CBR Corner value ÷ 8 = Σ of its Axial Coordinates • n, where n=x/4, e.i.
C R
46+78=124
124•4=496
496•8=3968
@16 STEPS
CBR=4MPS-x²=4z² - x²
180=(4•49)-4² @coordinates 10•18
836=(4•225)-8² @coordinates 22•38
Col (C)=y+z Row(R)=2z+x
C•R=CBR Area
C+R=nPN where n=x/4
R-C=z+1=2x
@coordinates 46 -- 78
R-C=z+1=2x=78-46=32
x=16 y=x-1=15 z=x+7=31
z^2=MPS=961 PN=xz=496
8PN=8•496=3968
4MPS=4z^2=3844
C•R=CBR Area=78•46=
4MPS-x^2=3844-256=3588
8PN-4MPS=PN/n
3968-3844=496/4
=124
The first four Mersenne PRIME - Perfect Number Squares on the BIM
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