## YELLOW CRnext line = GREEN PN line x 2 MPS=z2=225 2.8=240 40+16=256 The Perfect Numbers (PN) fall on a Diagonal Line (GREEN) that is half the distance in STEPS -- and values -- from the next Complement Rectangle (CR) values on the YELLOW Diagonal Line. 4CR+2x=CR-next 4.240 The STEPS are the number of cells diagonally +2•16=992 perpendicular to the the central Prime Diagonal (PD) (BLUE), with the point of origin being that of the 992+32=1024 CR+x=x-next Mersenne Prime Square (MPS) = $\mathbb{Z}^2$ where x=2^p-1, y=x-1, and $z=2^p -1$ . 55 See Table 132 for x, y, z, PN, CR,... values MPS=z2=3969 64 4CR+2x=CR-next 4•992 -+2 • 32 = 4032 -4032+64=4096 CR+x=x-next... 100 145 120 127 The first four Mersenne PRIME - Perfect Number Squares on the BIM Copyright@2022, Reginald Brooks, Brooks Design. All rights reserved.