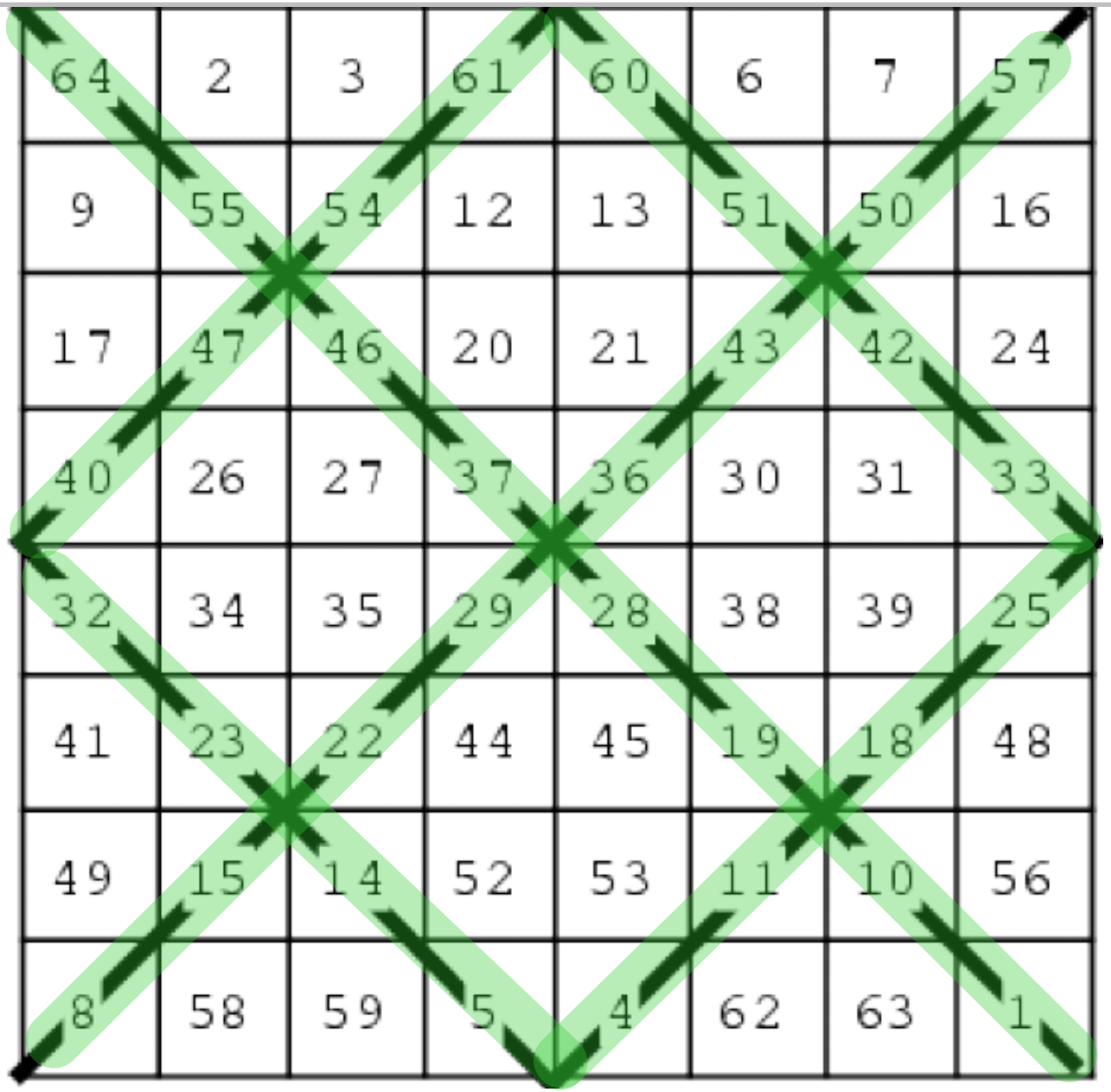
REMEMBER HOW TO CONSTRUCT AN 8 X 8 MAGIC SQUARE?

ADD THE ROWS, COLUMNS AND DIAGONALS TO PROVE THAT EACH EQUALS 260

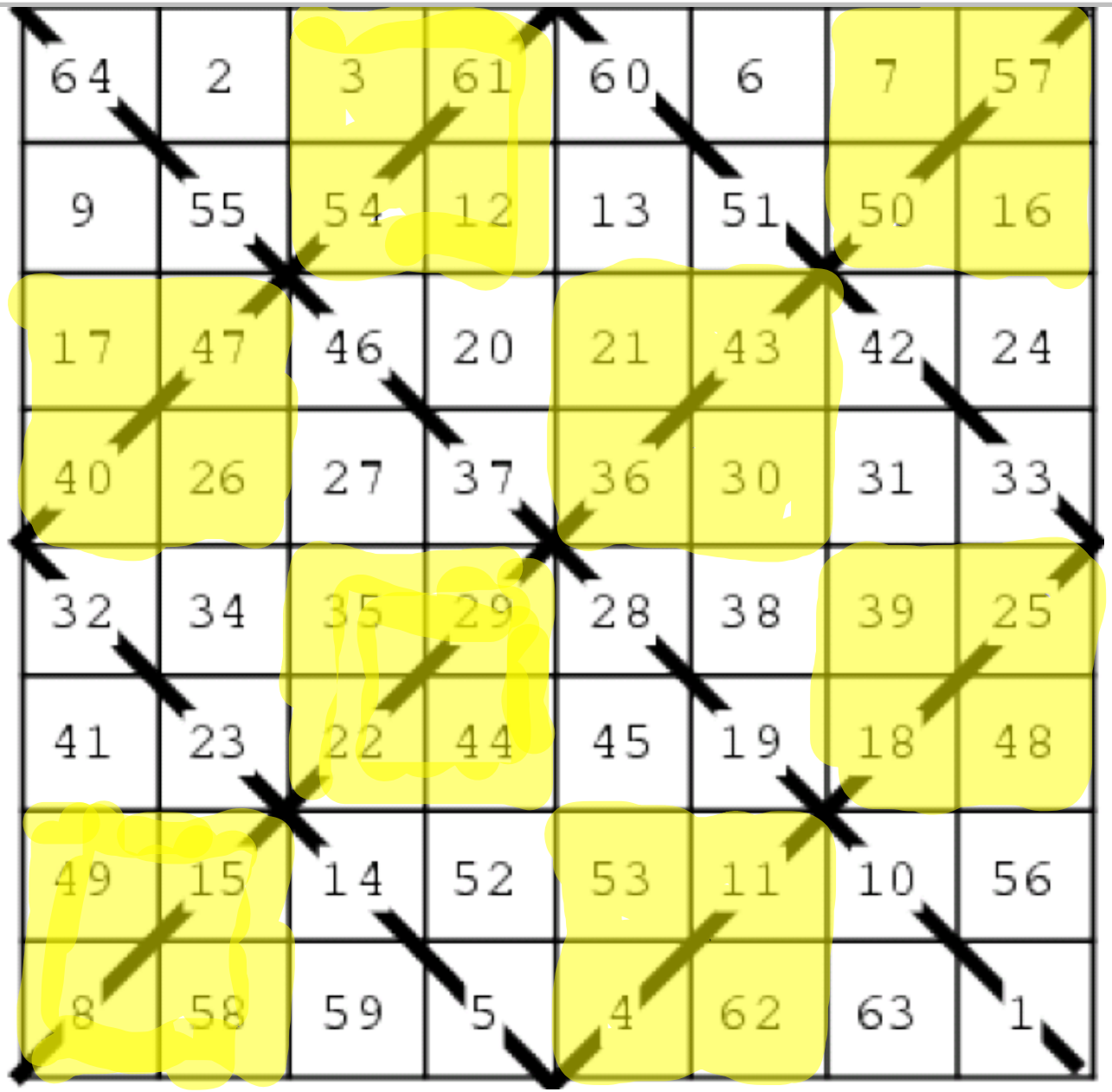
USE THE PAIRING OF 10s TO MAKE THIS JOB EASIER

The method for constructing magic squares of even numbered grids (divisible by 4) is to draw diagonals through each 4x4 subsquare and fill all squares in sequence. Then replace each entry on a crossed-off diagonal by or, equivalently, reverse the order of the crossed-out entries. Thus in the below example , the crossed-out numbers are originally 1, 4, ..., 61, 64, so entry 1 is replaced with 64, 4 with 61, etc.

CAN YOU FIND ADDITIONAL PATTERNS IN THIS EXTRAORINARY MAGIC SQUARE?


64 2 3 61 60 6 7 57
9 55 54 12 13 51 50 16
17 47 46 20 21 43 42 24
40 26 27 37 36 30 31 33
32 34 35 29 28 38 39 25
41 23 22 44 45 19 18 48
49 15 14 52 53 11 10 56
8 58 59 5 4 62 63 1

DID YOU NOTICE DIAGONALS THAT WERE SEPERATED BY 7s AND 9s?


64 2 3 61 60 6 7 57
9 55 54 12 13 51 50 16
17 47 46 20 21 43 42 24
40 26 27 37 36 30 31 33
32 34 35 29 28 38 39 25
41 23 22 44 45 19 18 48
49 15 14 52 53 11 10 56
8 58 59 5 4 62 63 1

DID YOU FIND THAT ALL OF THESE 2 X 2 SQUARES HAVE A SUM OF 130 WHICH IS HALF OF THE FULL ROW, COLUMN, DIAGONAL SUM OF 260?

ALSO, SEE THE SUM OF 130 IN EVERY 2 X 2 SQUARE NOT HIGHLIGHTED.