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 640: 437: 01
 History of Math HW 2

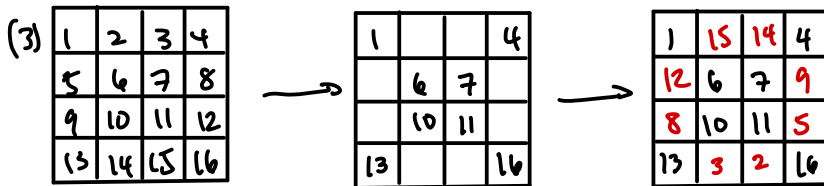
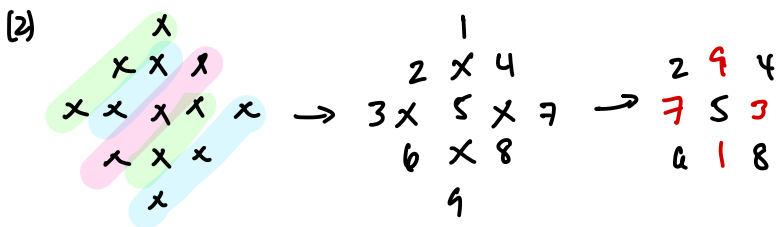
(1) The magic number for a magic square of size n would be $\frac{(n^2 + 1)n}{2}$

For example, in a magic square that has 4 rows, the magic number is known to be 34.

$$\frac{(4^2 + 1)4}{2} = 34$$

$$\frac{(17)4}{2} = 34$$

$$34 = 34 \checkmark$$



(4)

30	38	46	5	13	21	22
39	47	6	14	15	23	31
48	7	8	16	24	32	40
1	9	17	25	33	41	49
10	18	26	34	42	43	2
19	27	35	36	44	3	11
28	29	37	45	4	12	20

(5)

A	1	3	5	7
B	2	B	A	A
	4	B	B	A
	6	B	B	A

They would have an equal probability of winning

(6)

A
B
2
9
4
7
B
A
B
3
B
A
A

 \Downarrow

A wins

B
C
7
5
3
6
B
C
C
1
D
B
B
8
C
C
C

 \Downarrow

B wins

C
A
6
1
8
2
C
A
C
9
A
A
A
4
C
A
C

 \Downarrow

C wins

Deck A is better than deck B
 Deck B is better than deck C
 Deck C is better than deck A } sucker's paradigm.