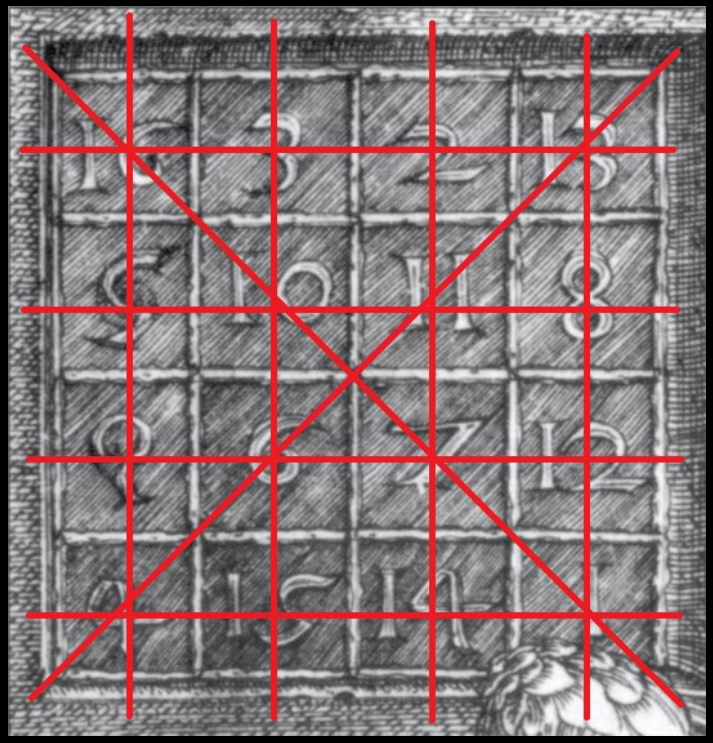
Nightking

Magic Squares

Full magic

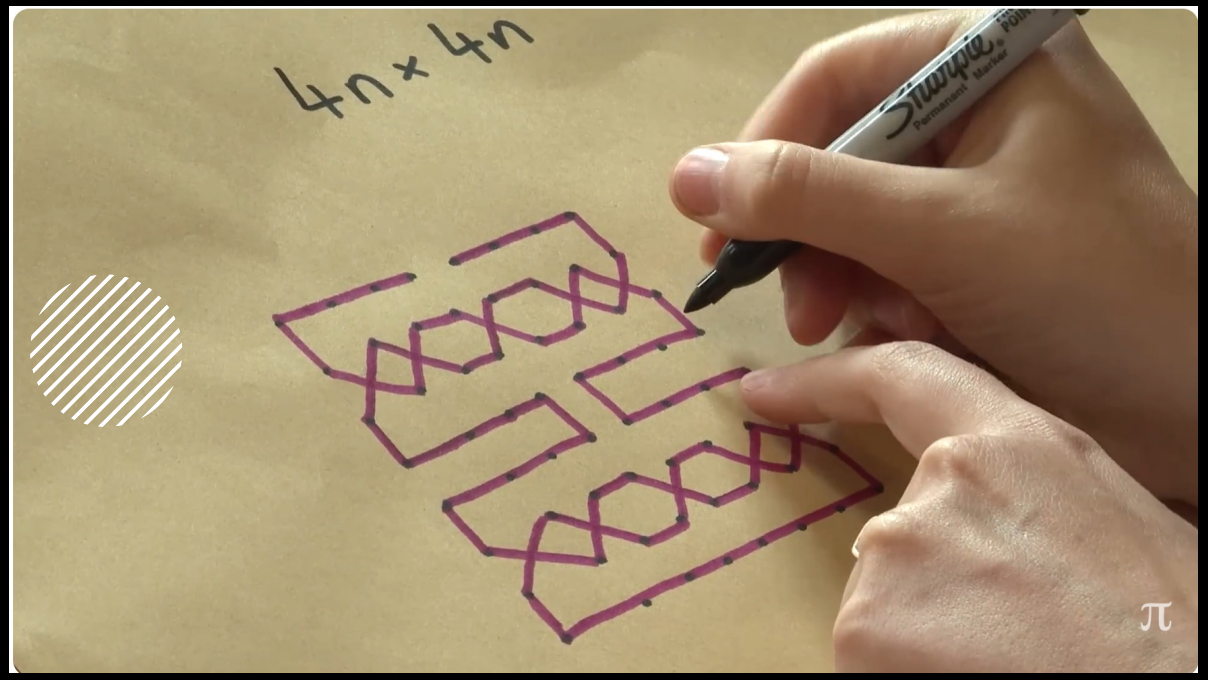
Numbers from 1 to n^2



Knight's Tours

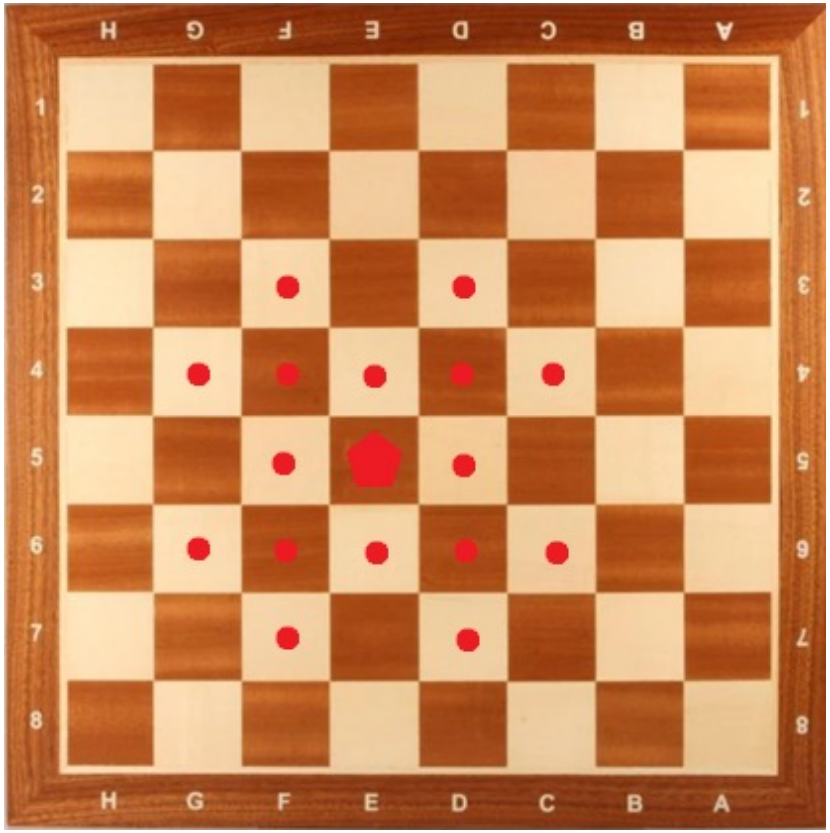
1	48	31	50	33	16	63	18
30	51	46	3	62	19	14	35
47	2	49	32	15	34	17	64
52	29	4	45	20	61	36	13
5	44	25	56	9	40	21	60
28	53	8	41	24	57	12	37
43	6	55	26	39	10	59	22
54	27	42	7	58	23	38	11

King’s Tours



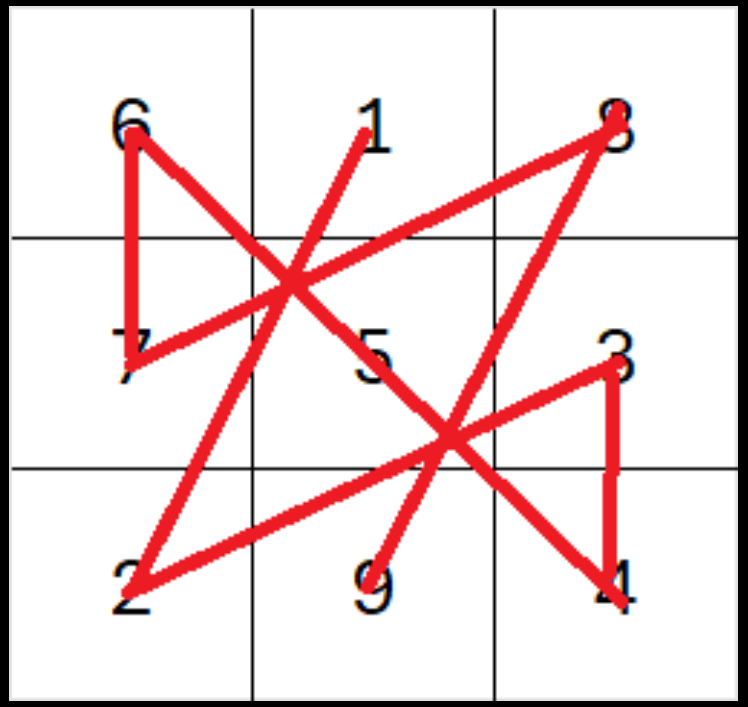
(© numberphile)

The Nightking



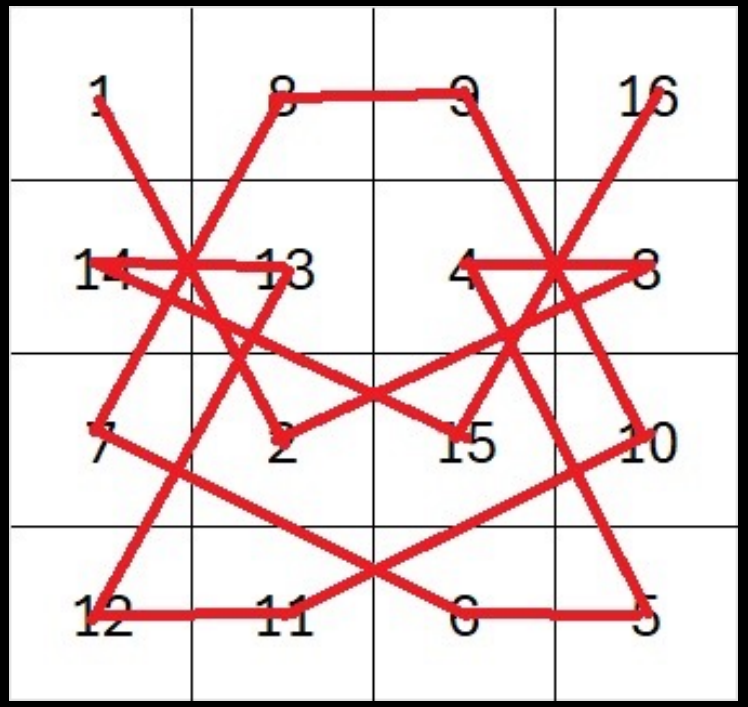
3x3

- 1 magic nightking’s tour (not closed)
- 0 magic king’s tour
- 0 (magic) knight’s tour



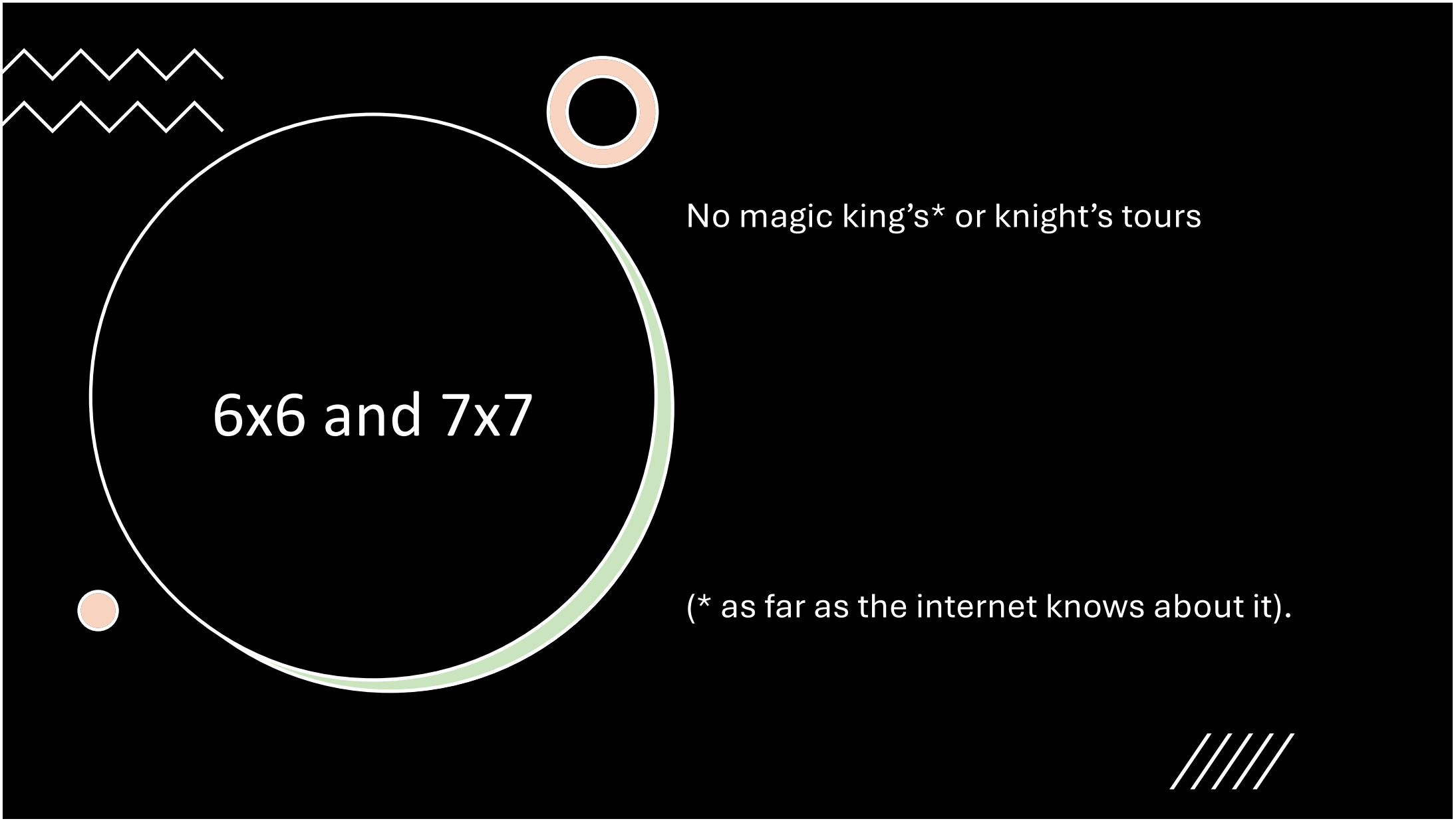
4x4

- 1 magic nightking’s tour (not closed)
- 0 magic king’s tour
- 0 (magic) knight’s tour



5x5

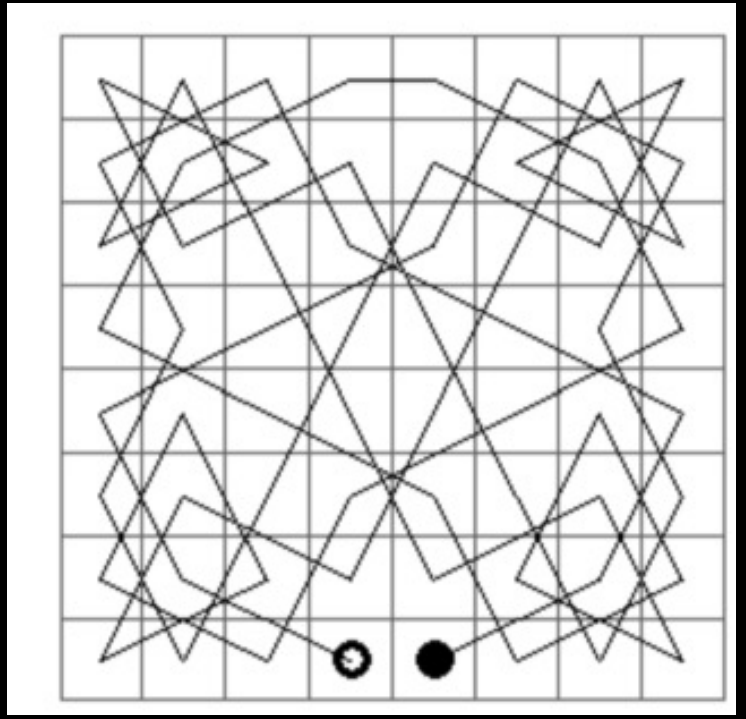
0 magic nightking's tour

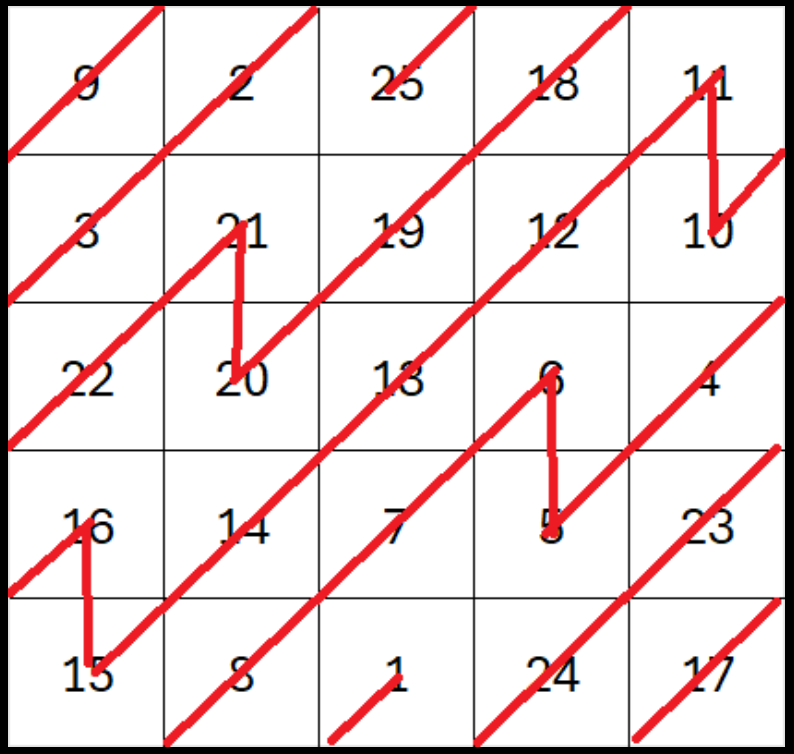

6x6 and 7x7
No magic king's* or knight's tours
(* as far as the internet knows about it).

8x8

36 Magic knight’s tours with 1 king’s move in the middle

(closed: 12)



(reference: Yann Denef)

Going toral for fun and profit