

Quadruple Sudoku

Tony Sudbery

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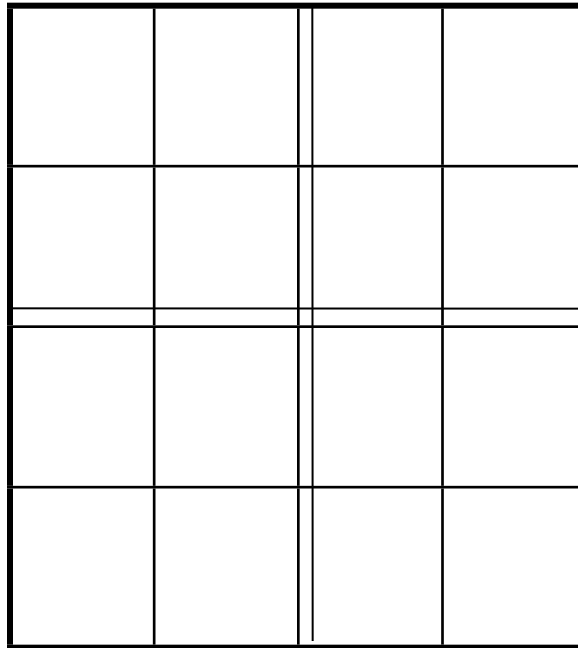
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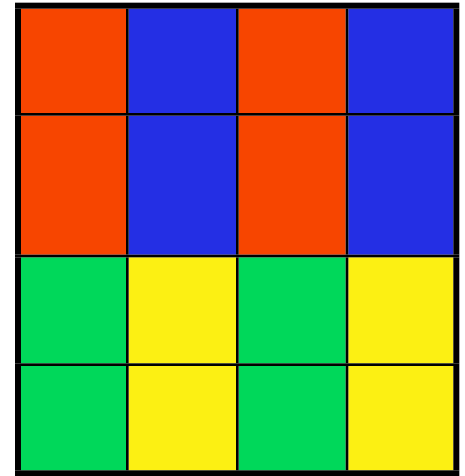
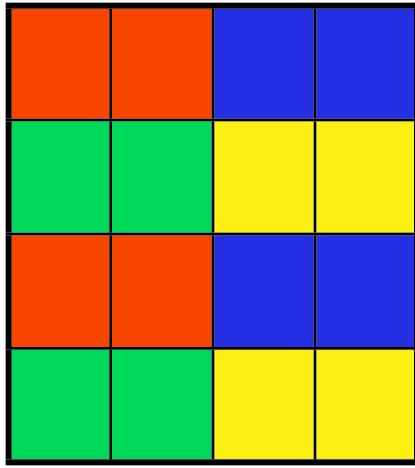
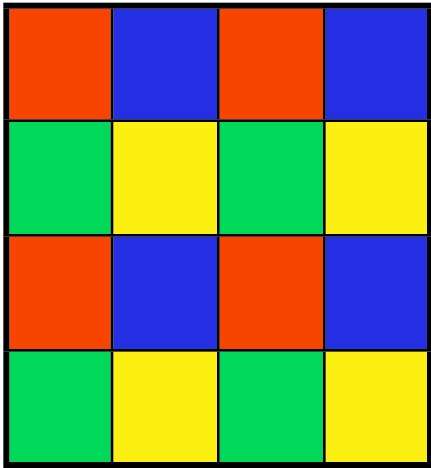
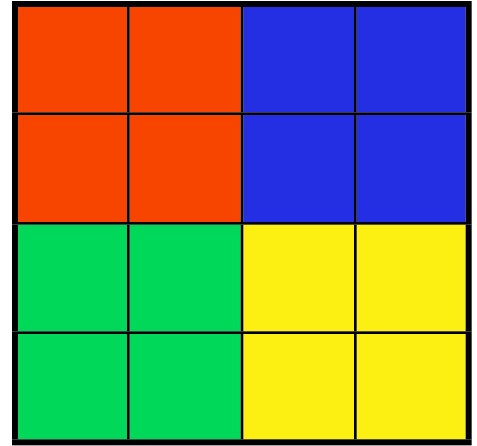
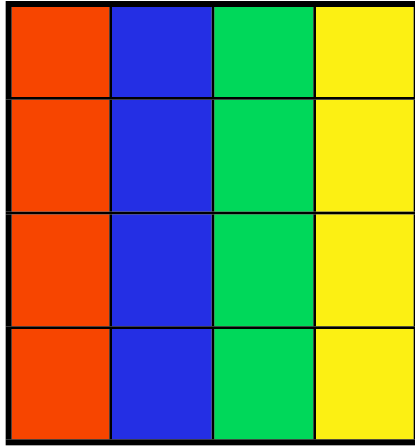
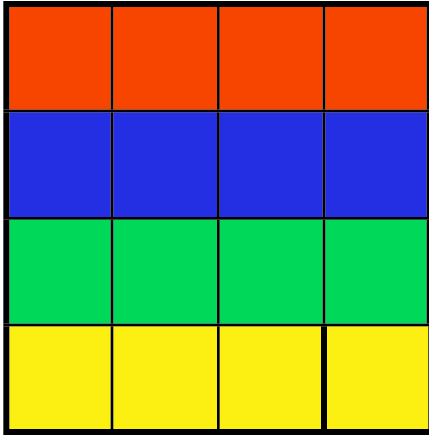
1	2	3	8	9	7	6	4	5
4	5	6	2	3	1	9	7	8
7	8	9	5	6	4	3	1	2
9	7	8	4	5	6	2	3	1
3	1	2	7	8	9	5	6	4
6	4	5	1	2	3	8	9	7
5	6	4	3	1	2	7	8	9
8	9	7	6	4	5	1	2	3
2	3	1	9	7	8	4	5	6

1	2	3	8	9	7	6	4	5
4	5	6	2	3	1	9	7	8
7	8	9	5	6	4	3	1	2
9	7	8	4	5	6	2	3	1
3	1	2	7	8	9	5	6	4
6	4	5	1	2	3	8	9	7
5	6	4	3	1	2	7	8	9
8	9	7	6	4	5	1	2	3
2	3	1	9	7	8	4	5	6

Baby Sudoku

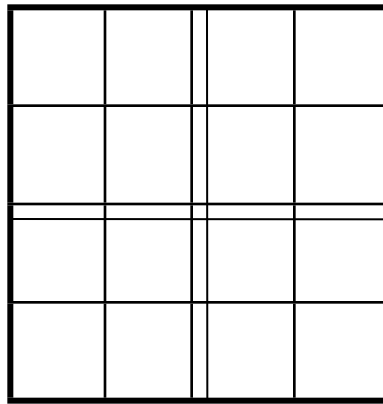
Challenge: Can you set a 2x2x2x2 quadruple Sudoku?





Baby Sudoku

Challenge: Can you set a 2x2x2x2 quadruple Sudoku?



If not, why not?



Dürer's übermagic square

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	5

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

- There are 86 4-element subsets of $\{1, \dots, 16\}$ which sum to 34.
- 52 of these are plane squares in 4D
- Number which are not plane squares =

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34

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- 52 of these are plane squares in 4D
- Number which are not plane squares =

34

- Number listed by Alex Bellos = 34