<u>CROSSWORD POLYOMINOES</u> puzzles by Rodolfo Kurchan

Put "I" polyominoes from 2 to N in the smallest possible area rectangle.

In each rectangle should appear only 1 of each and all the polyominoes should be in contact.

https://oeis.org/A380025

OEIS: **2, 6, 12, 15, 24, 35, 40, 54, 65, 77, 96, 112, 126, 150, 160**, 187, 207, 228, 252, 294, 308

N	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Area	2	6	12	15	24	35	40	54	65	77	96	117	126	150
Free space	0	2	5	4	10	16	14	23	25	30	42	55	51	66
Black squares	2	4	7	11	14	19	26	31	40	47	54	62	75	84

N	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Area	160	187	207	228	252	294	308				429			
Free space	64	79	81	94	104	133	127							
Black squares	96	108	126	134	148	161	181							

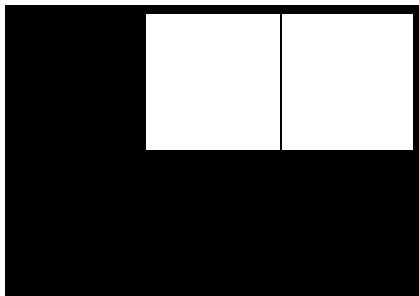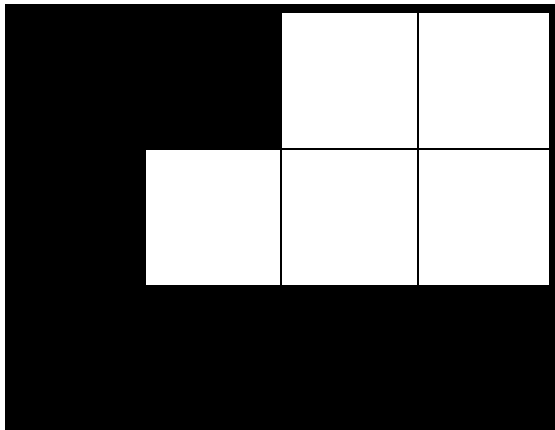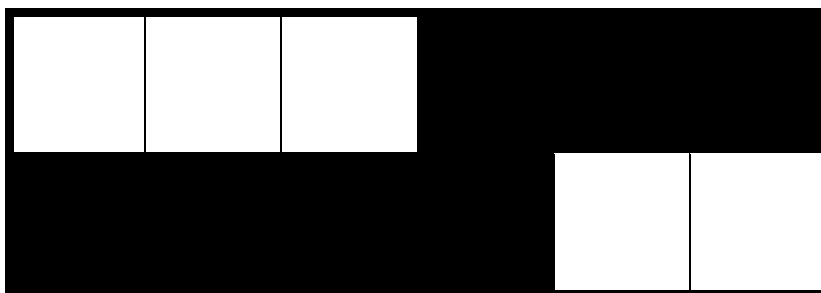| N	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Area	570				731									
Free space														
Black squares														

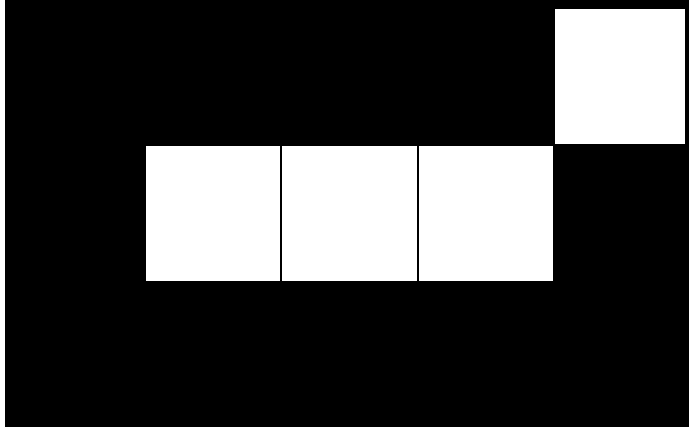**2 = 2 (1 x 2) (0 free space)**

2 to 3 = 6 (2 x 3) (2 free space)

2 to 4 = 12 (3 x 4) (5 free space)

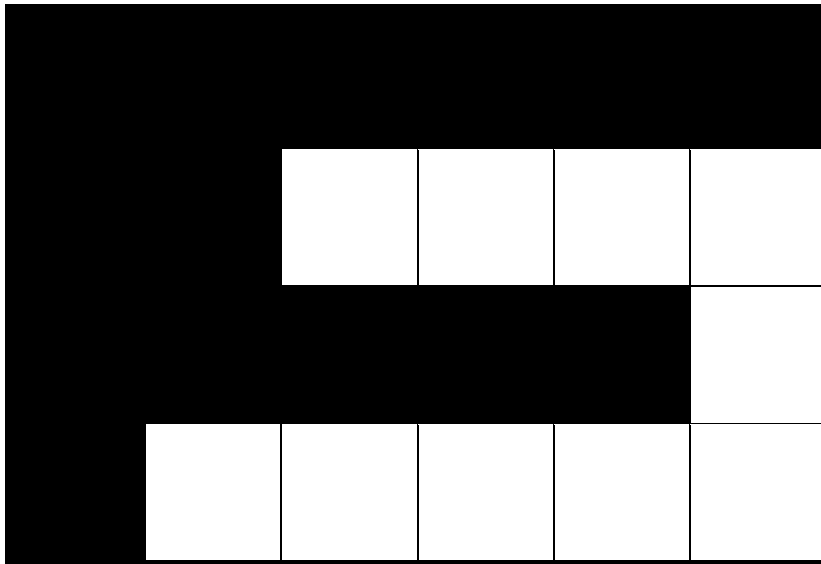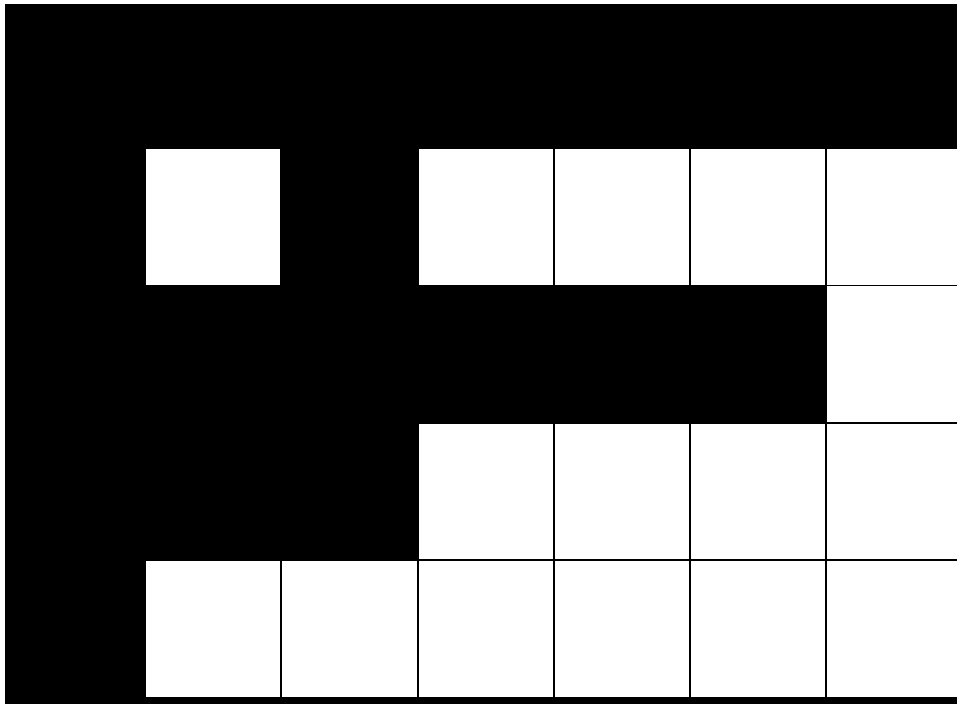**2 to 4 = 12 (2 x 6) (5 free space)**
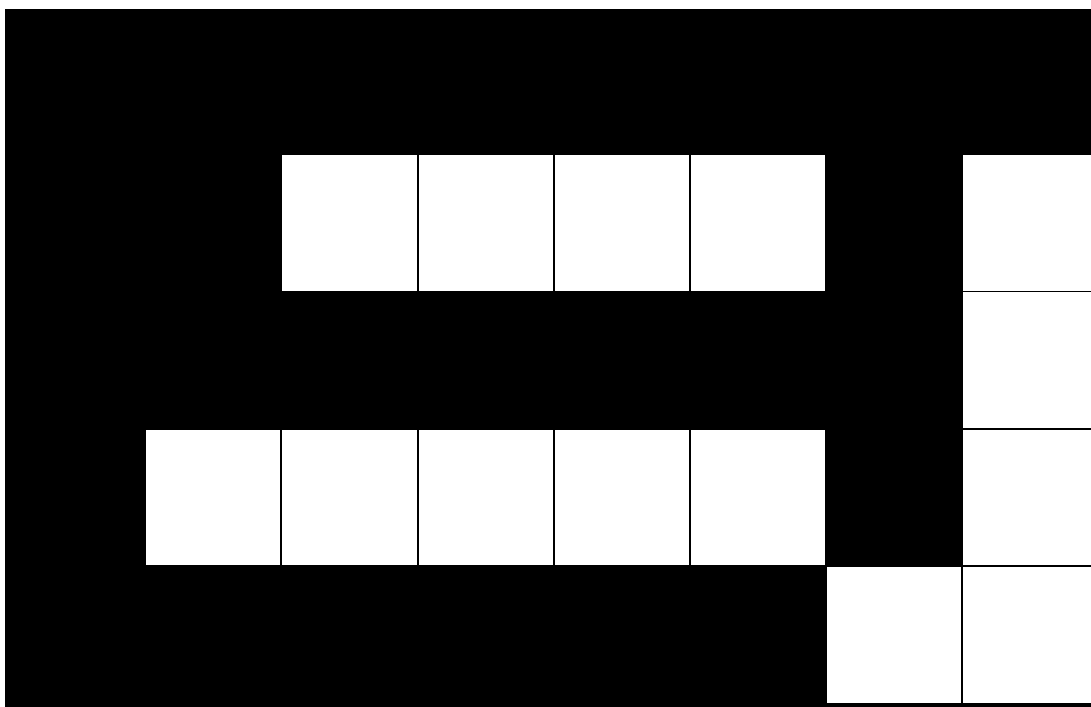
2 to 5 = 15 (3 x 5) (4 free space)

2 to 6 = 24 (4 x 6) (from 8 to 10 free space by George Sicherman)

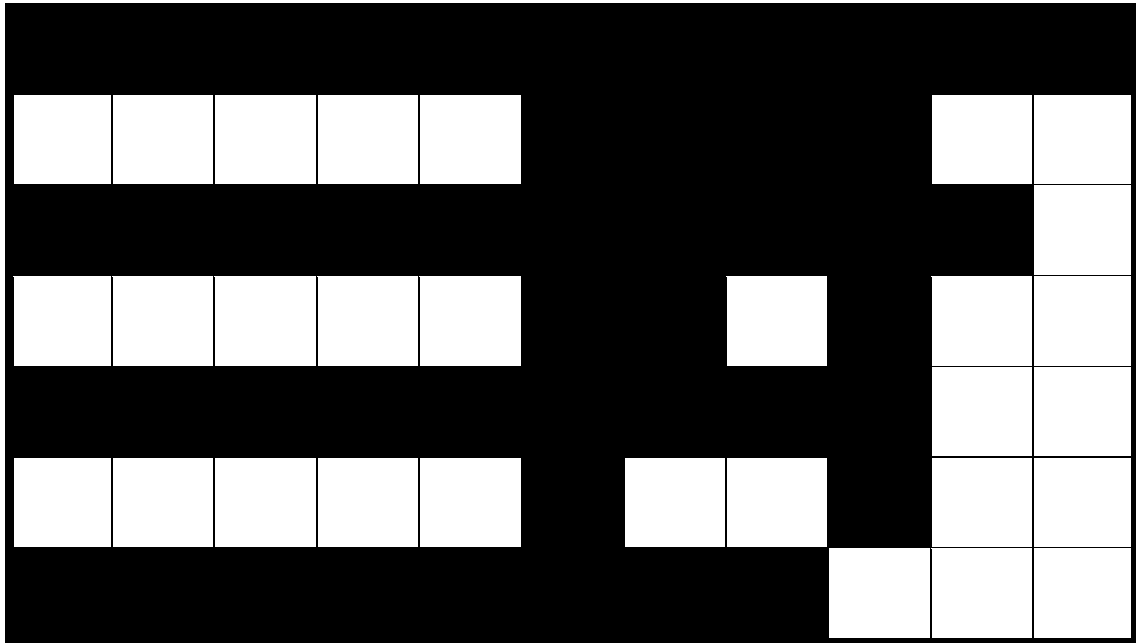**2 to 7 = 35 (5 x 7) (from 14 to 16 free space by George Sicherman)**

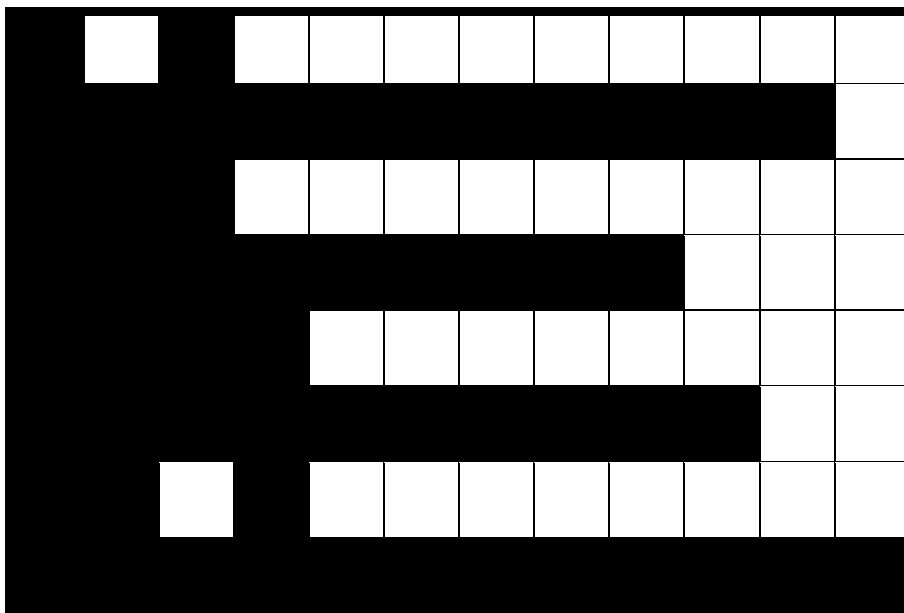**2 to 8 = 40 (5 x 8) (from 13 to 14 free space by George Sicherman)**

2 to 9 = 54 (6 x 9) (from 19 to 23 free space by George Sicherman)

2 to 10 = from 70 to 65 (5 x 13) (25 free space) by George Sicherman

2 to 11 = 77 (7 x 11) (from 27 to 30 free space by Giorgio Vecchi)

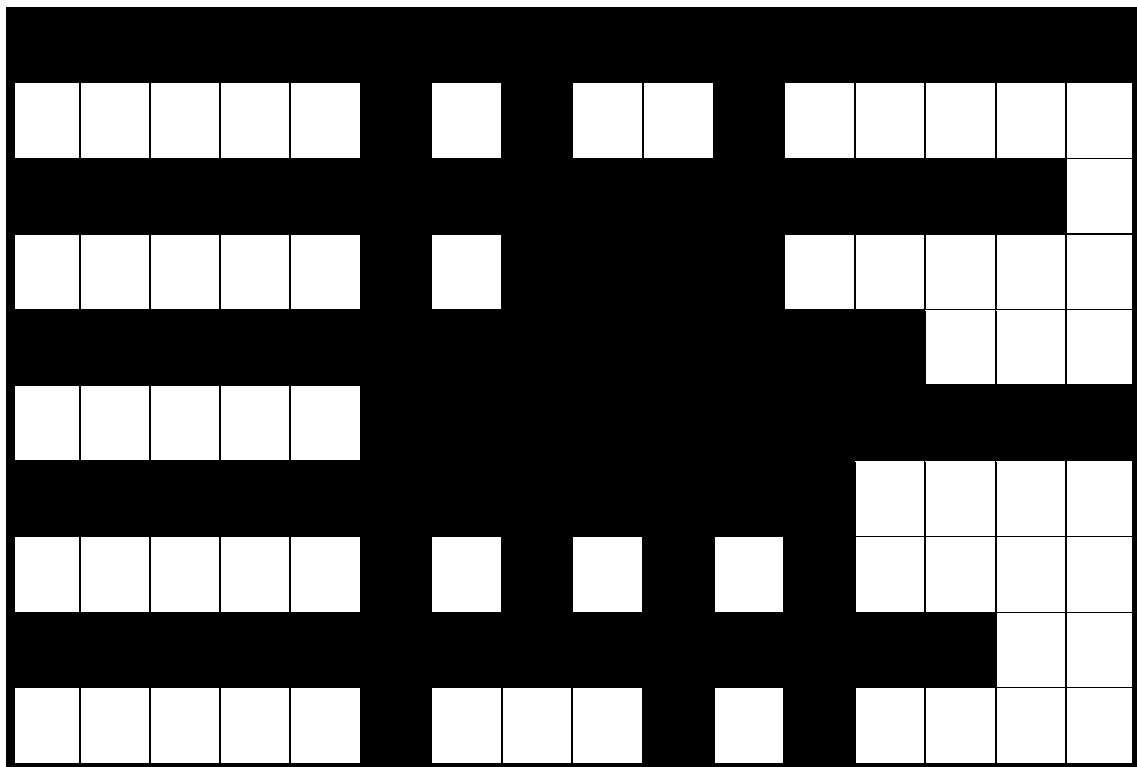## 2 to 12 = from 98 to 96 (8 x 12) (42 free space) by George Sicherman
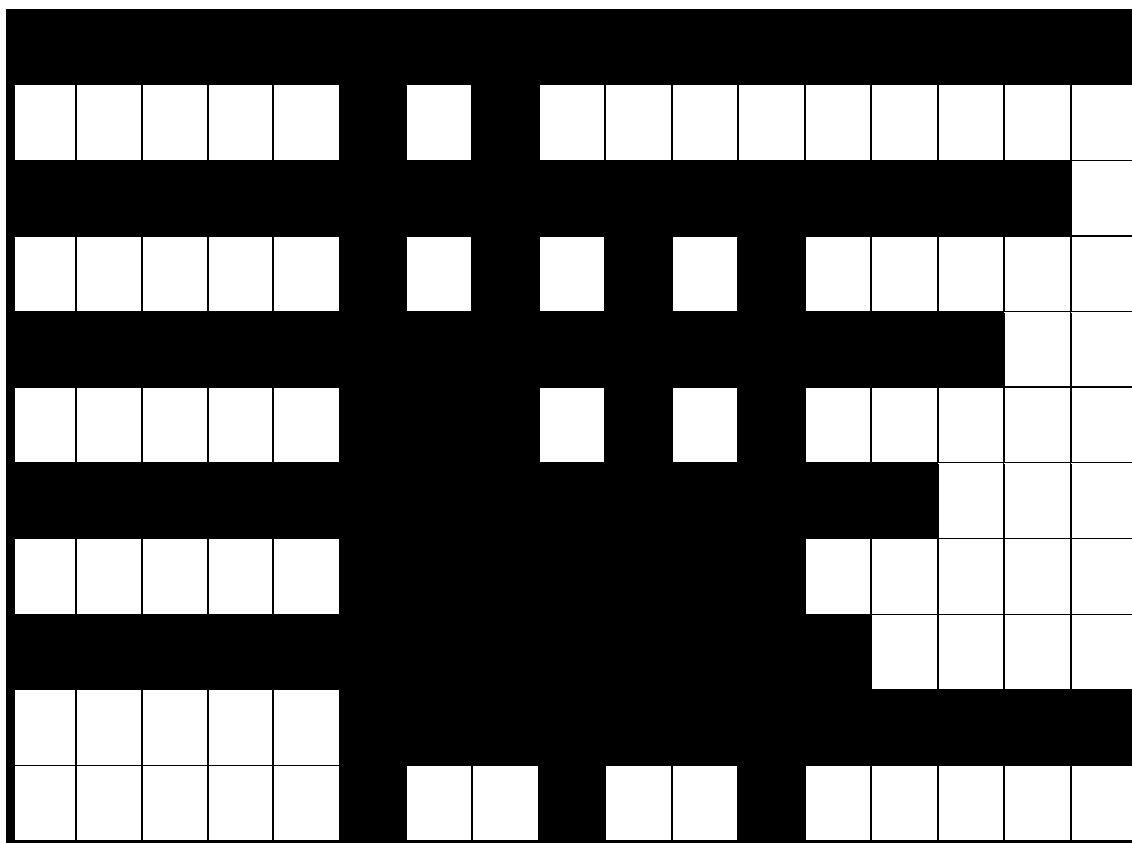
2 to 13 = from 117 to 112 (8 x 14) (49 free space) by George Sicherman

2 to 14 = from 135 to 126 (9 x 14) by Rodolfo Kurchan and (from 50 to 51 free space) by Giorgio Vecchi

2 to 14 = 126 (7 x 18) (but 49 free space) by Rodolfo Kurchan

2 to 15 = 150 (10 x 15) (from 64 to 66 free space) by Giorgio Vecchi

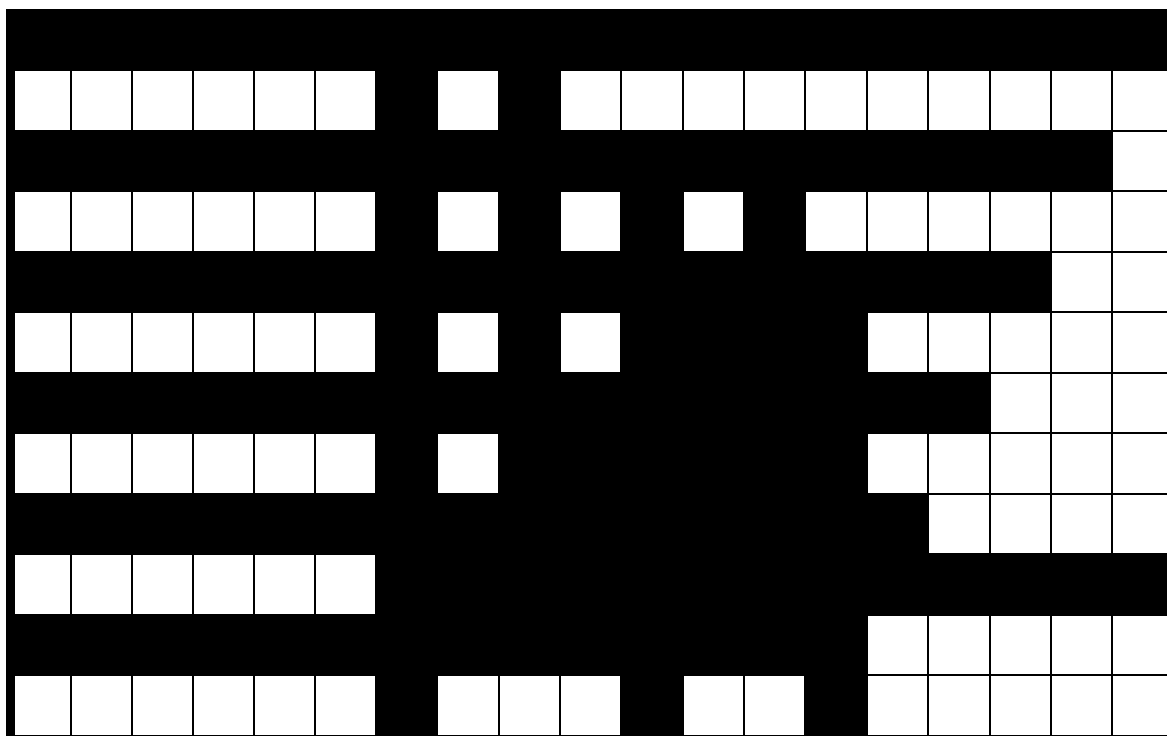# 2 to 16 = 160 (10 x 16) (64 free space) by Giorgio Vecchi

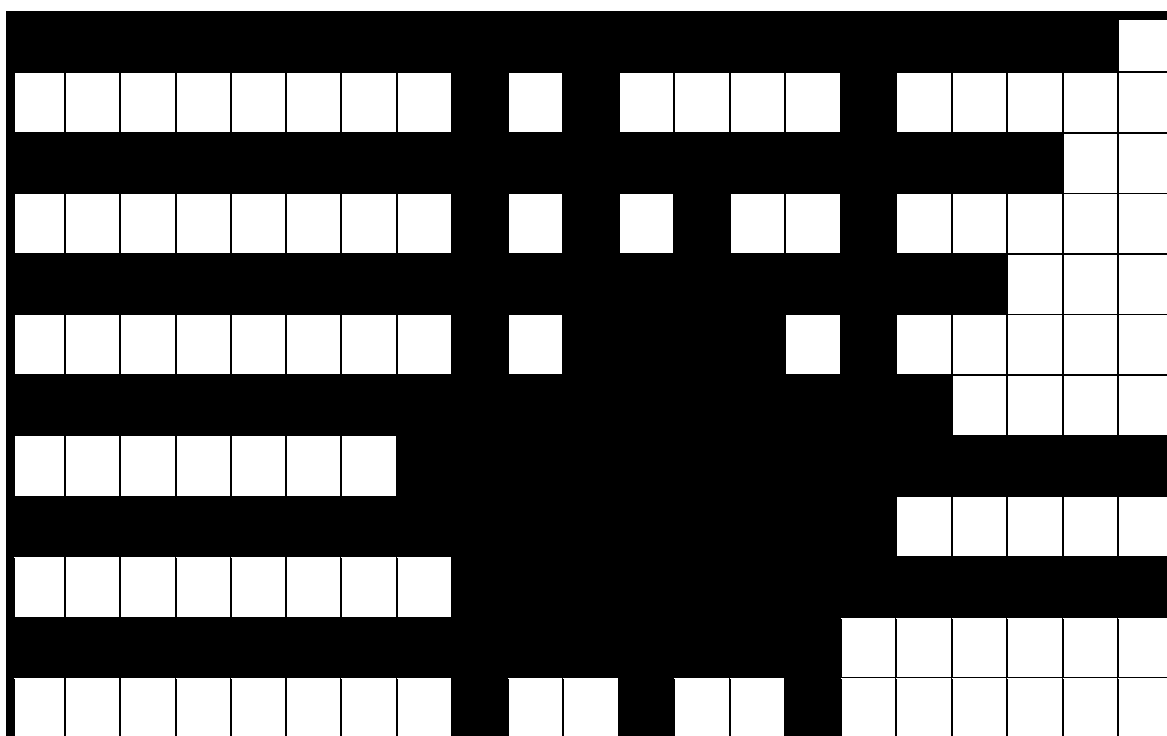## 2 to 17 = 187 (11 x 17) (79 free space) by Giorgio Vecchi

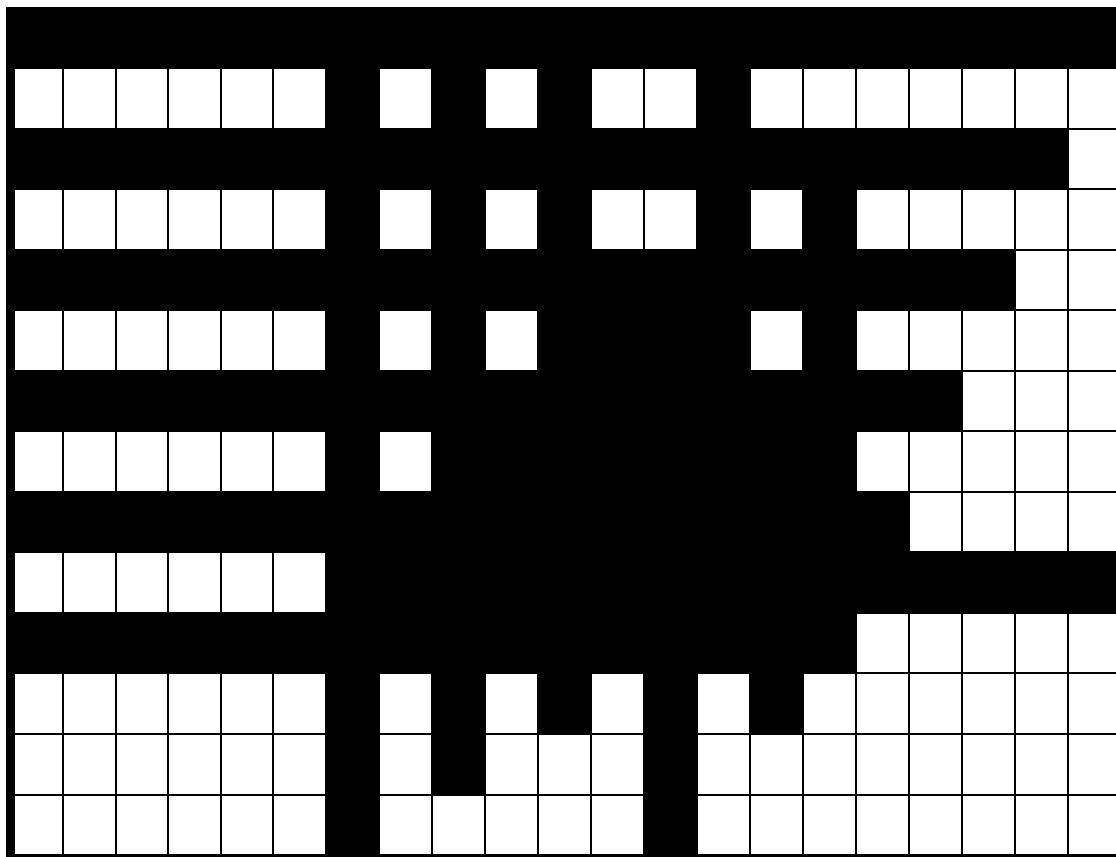## 2 to 18 = 207 (9 x 23) (81 free space) by Giorgio Vecchi
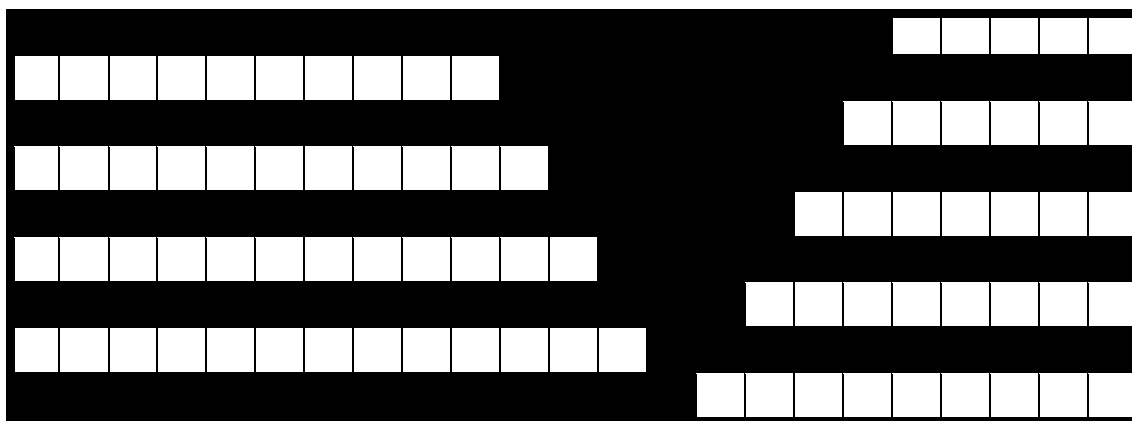
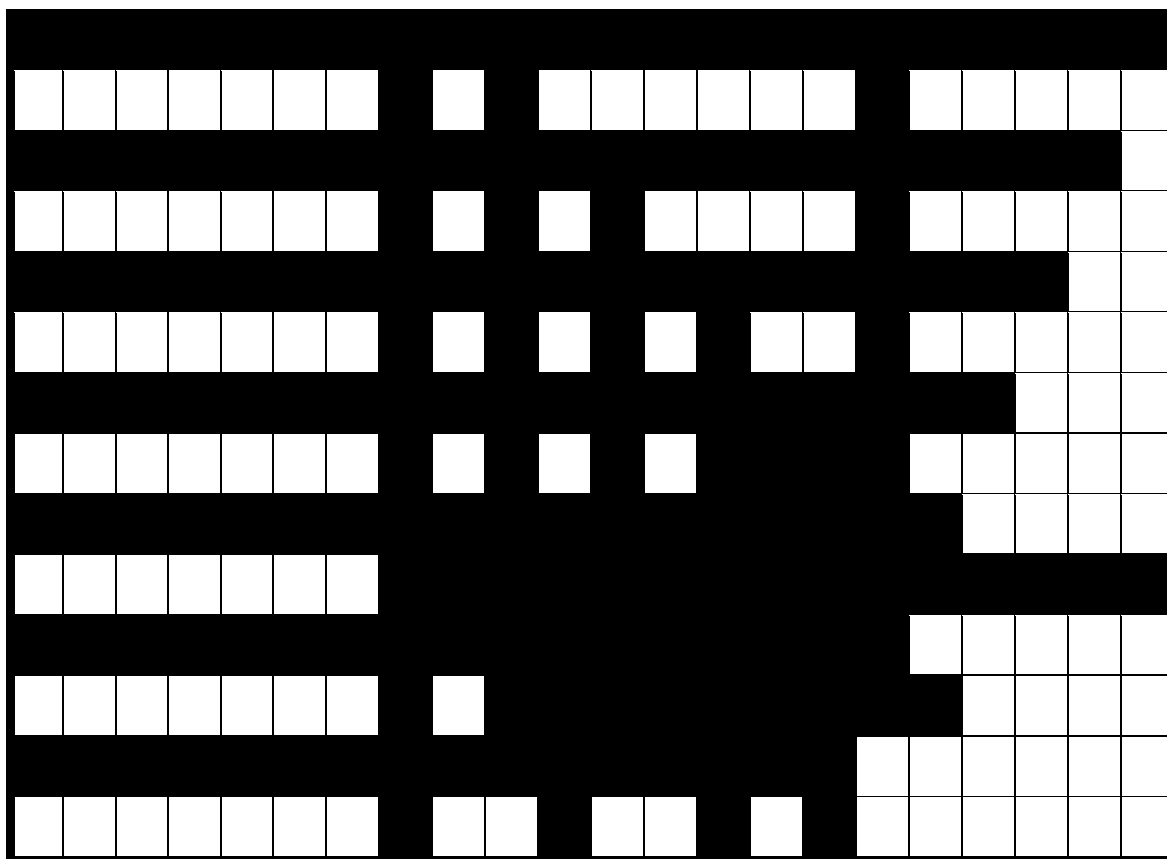## 2 to 19 = 228 (12 x 19) (94 free space) by Giorgio Vecchi

2 to 20 = 252 (12 x 21) (104 free space) by Giorgio Vecchi

2 to 21 = 294 (14 x 21) (133 free space) by Giorgio Vecchi

2 to 22 = 308 (14 x 22) (127 free space) by Giorgio Vecchi

2 to 22 = 308 (11 x 28) (121 free space) by Rodolfo Kurchan

2 to 26 = 429 (13 x 33) (169 free space) by Rodolfo Kurchan

And we can generalize this method, next

2 to 30 = 570 (15 x 38) by Rodolfo Kurchan

2 to 34 = 731 (17 x 43) by Rodolfo Kurchan