

ONE UP POLYOMINOES

<https://www.oneuppuzzle.com/>

Last update March 27, 2024

Which are the polyominoes that have ONE UP solution and how many are?

OEIS sequence for the moment are:

1) Quantity of ONE UP polyominoes

<https://oeis.org/A371476>

1,0,1,1,1,3, 10, 12, 23, 35, 169, 255, 817, 1883, 4702
found by Pontus von Brömssen

2) Total number of solutions for each polyomino

1,0,1,2,1....

MONOMINO = 1

DOMINO = 0

TROMINOS = 1

	1
1	2

TETROMINOS = 1

1	2	2	1
2	1	1	2

Solutions = 2

PENTOMINOES = 1

W = 1 SOLUTION

	2	1
2	1	
1		

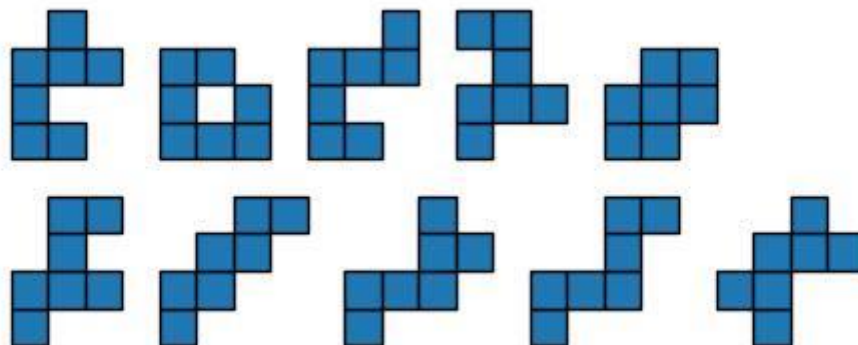
HEXOMINOES = 3

1		
2	1	
3	2	1

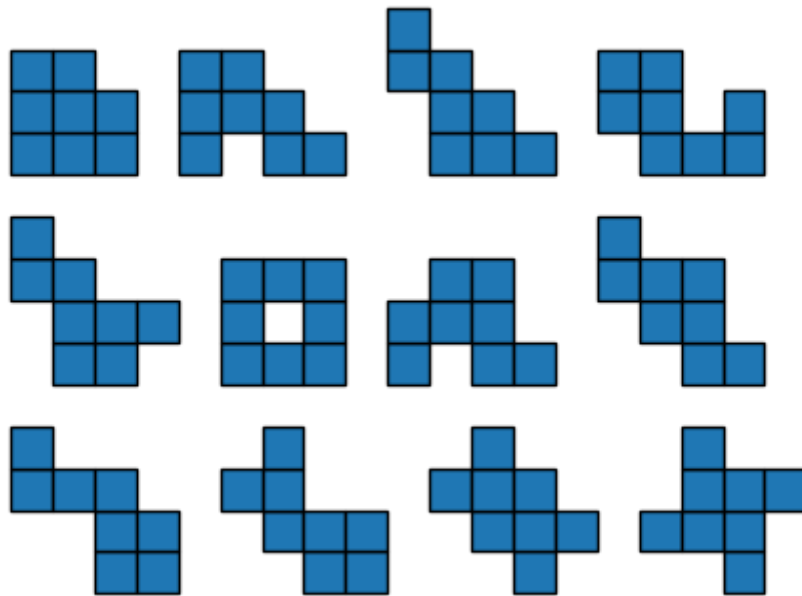
1	2	
2	3	1
	1	

2	1	
3	2	1
1		

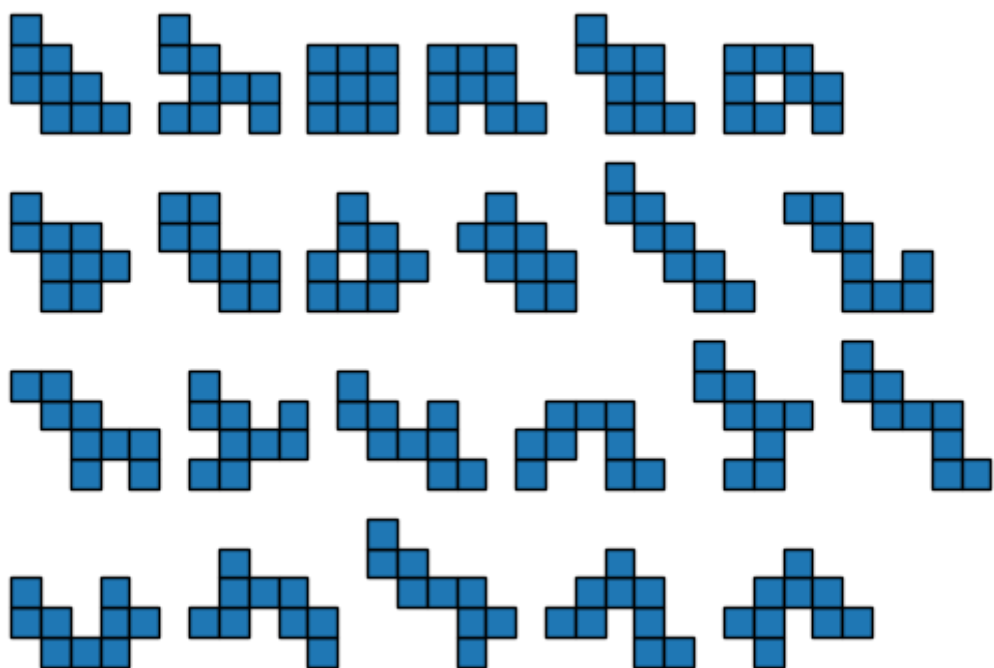
HEPTOMINOES = 10 by Pontus von Brömssen



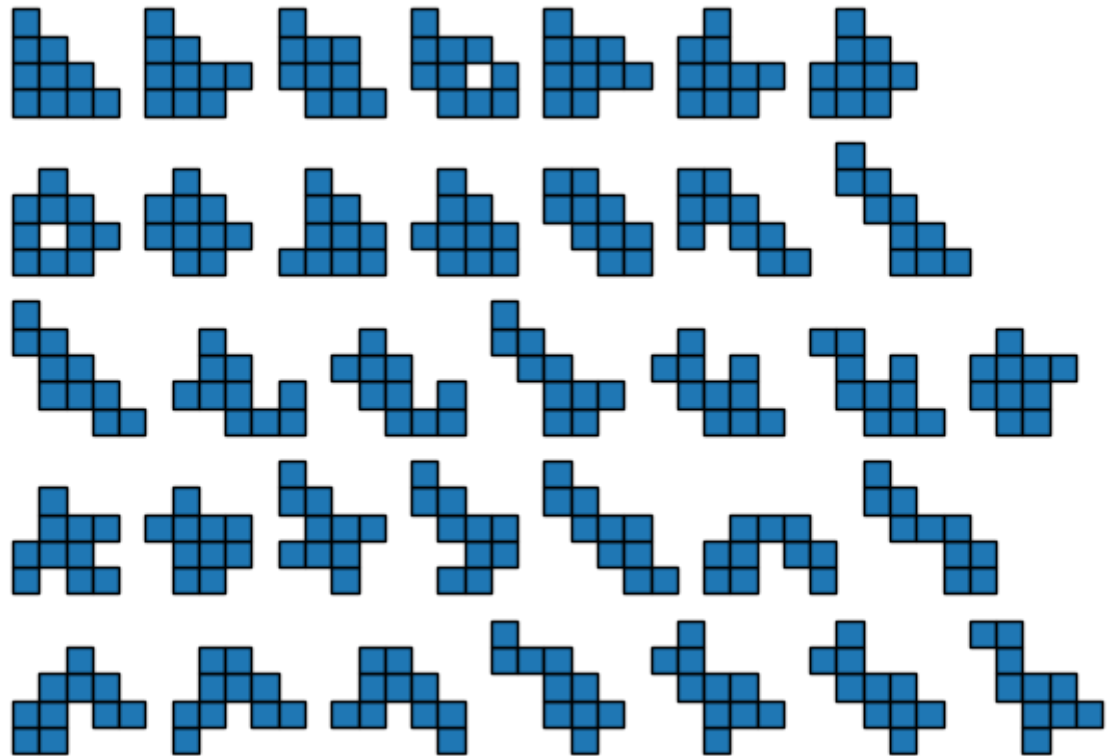
OCTOMINOES = 12 by Pontus von Brömssen



9-OMINOES = 23



10-OMINOES = 35



11-OMINOES = 169

12-OMINOES = 255

13-OMINOES = 817

14-OMINOES = 1.833

15-OMINOES = 4.702

P = POLYOMINO

Q = QUANTITY

OU = ONE UP SOLUTIONS

P	1	2	3	4	5	6	7	8
Q	1	1	2	5	12	35	108	369
OU	1	0	1	1	1	3	10	12
QOU	1	0	1	2	1			

P	9	10	11	12	13	14	15	16
Q	1.285	4.655	17.073	63.600	238.591	901.971	3.426.576	
OU	23	35	169	255	817	1833	4702	
QOU								

1, 1, 1, 2, 5, 12, 35, 108, 369, 1285, 4655, 17073, 63600, 238591,
901971, 3426576, 13079255, 50107909, 192622052, 742624232, 2870671950,
11123060678, 43191857688, 168047007728, 654999700403, 2557227044764,
9999088822075, 39153010938487,

