

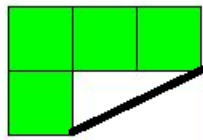
Sequence definition: The number of free polyominoes of area n that fill their minimal enclosing circle (MEC). A polyomino “fills” its minimal enclosing circle if no square may be added to it that doesn’t have some point outside of the circle.

Data (offset 1):

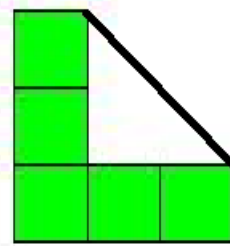
Size	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Number	1	1	0	1	1	2	1	1	1	1	1	3	2	2	2	3	2	3	1	3	2	4	1

MEC fillers satisfy the following necessary (though not sufficient) conditions:

1. They are convex (as that term applies to polyominoes).
2. The absolute difference between height and width is at most 1.
3. Any diagonal line joining “adjacent” outward corners has a height of 1 or a width of 1. See these two examples:



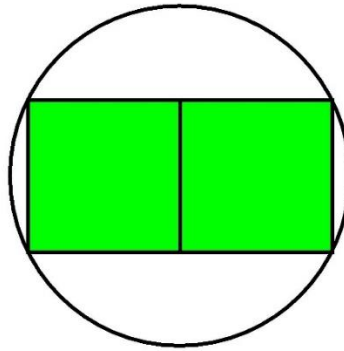
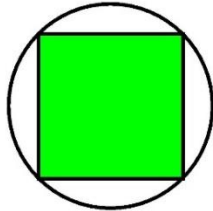
OK



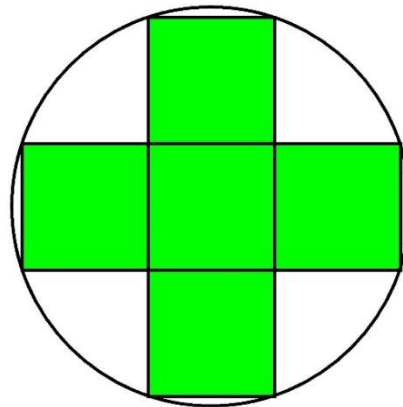
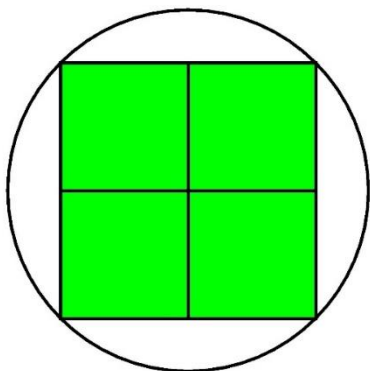
NOK

Illustrations of MEC filling polyominoes of sizes 1 through 23:

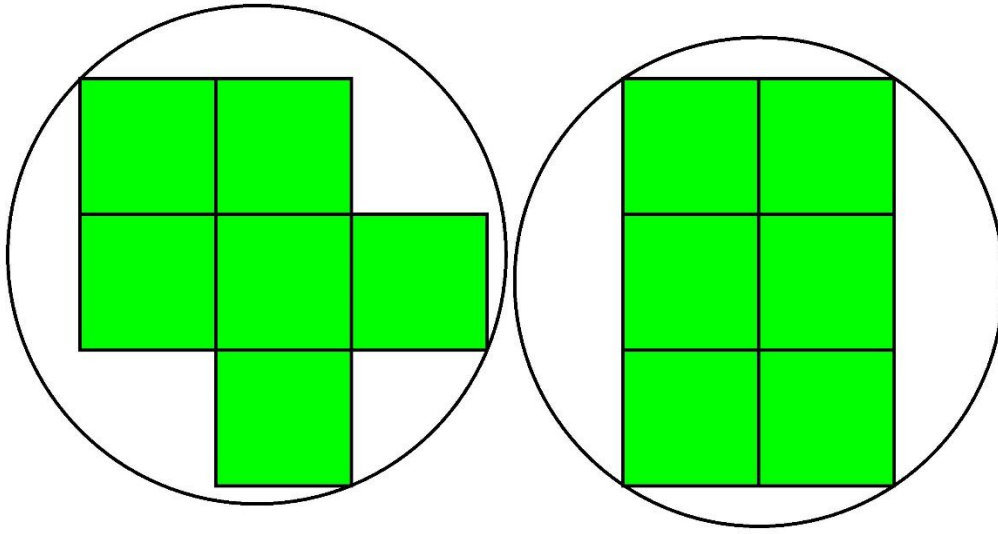
Sizes 1 and 2:



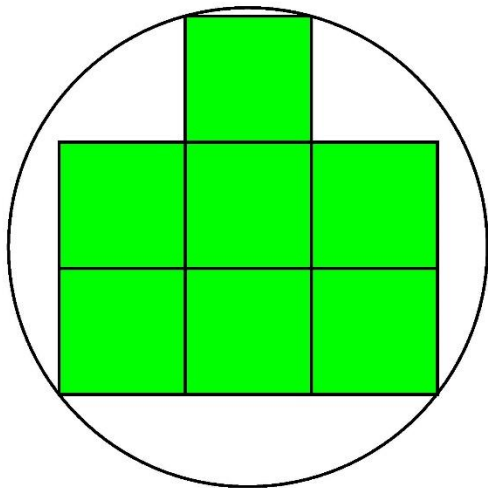
Sizes 4 and 5:



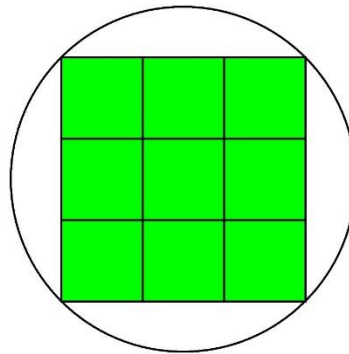
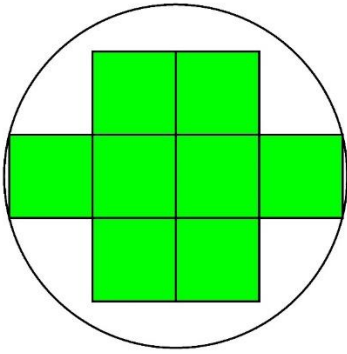
Size 6:



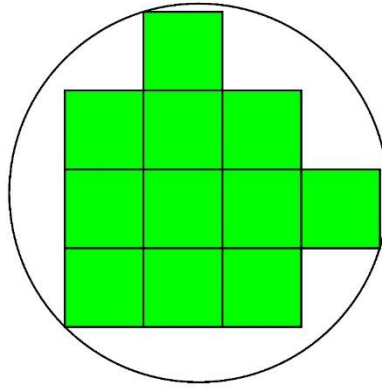
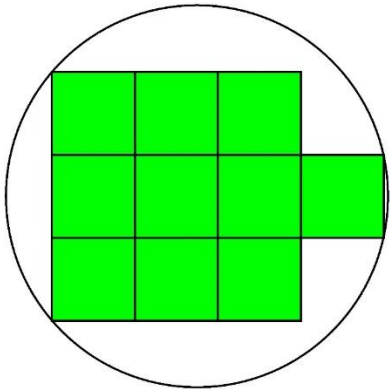
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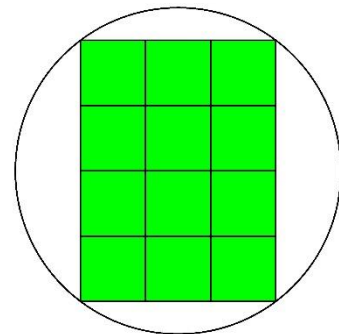
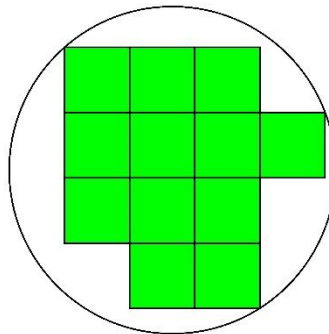
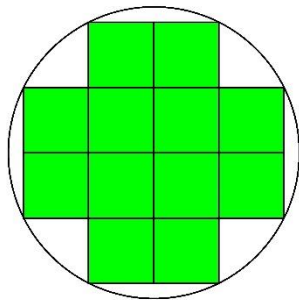
Sizes 8 and 9:



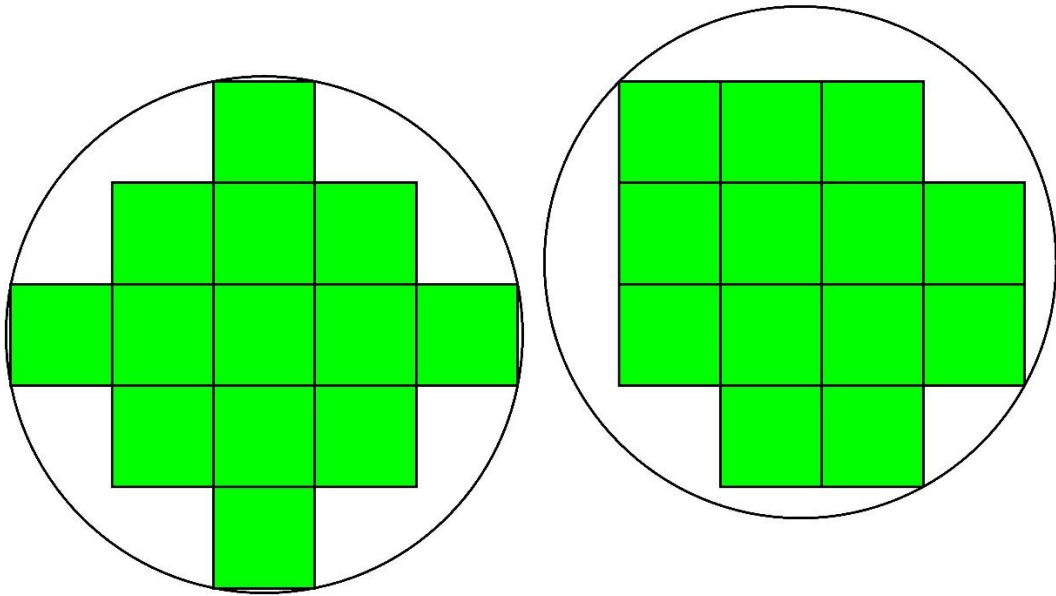
Sizes 10 and 11:



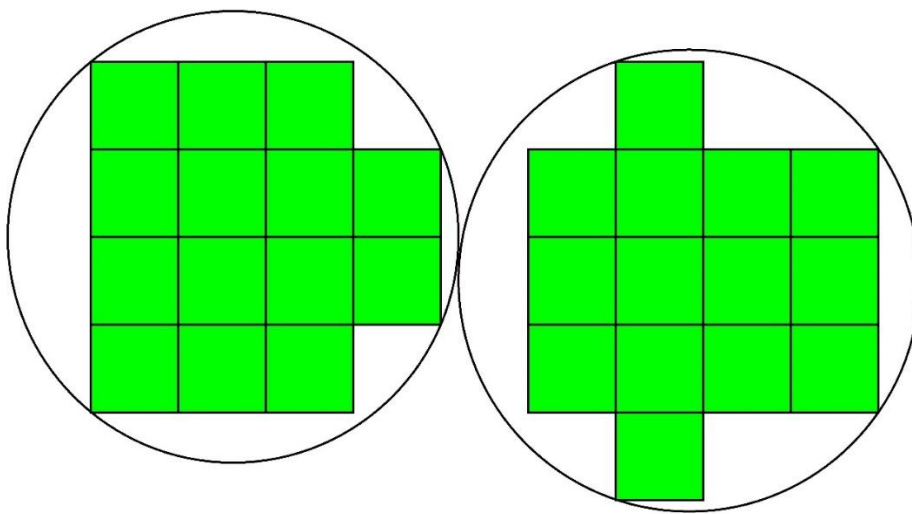
Size 12:



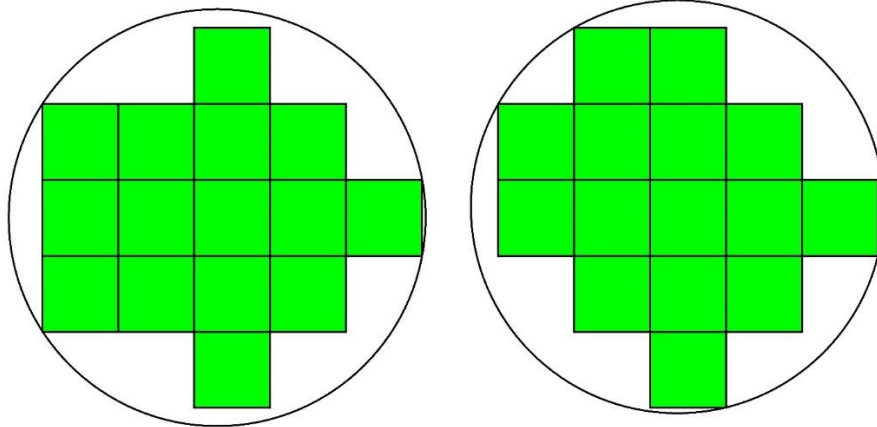
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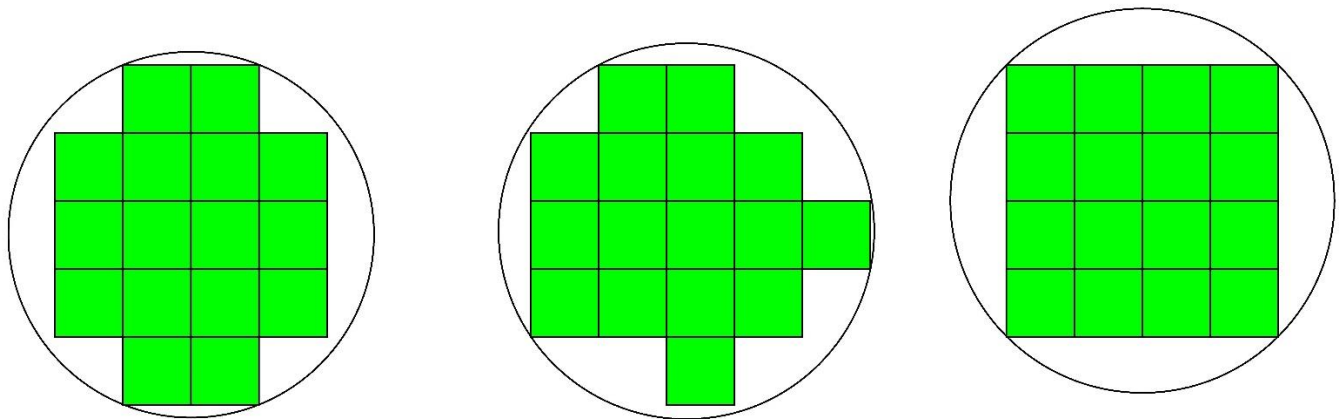
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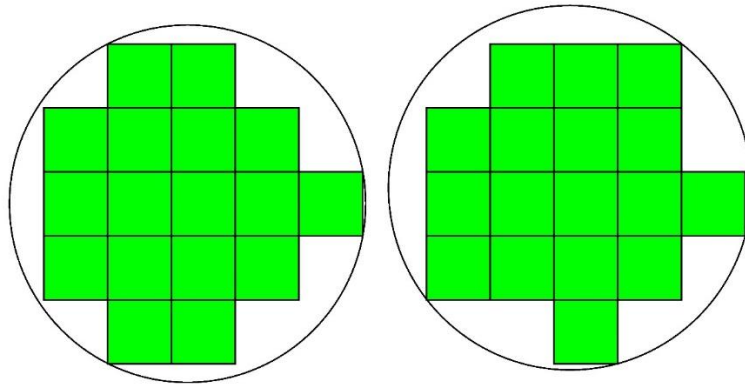
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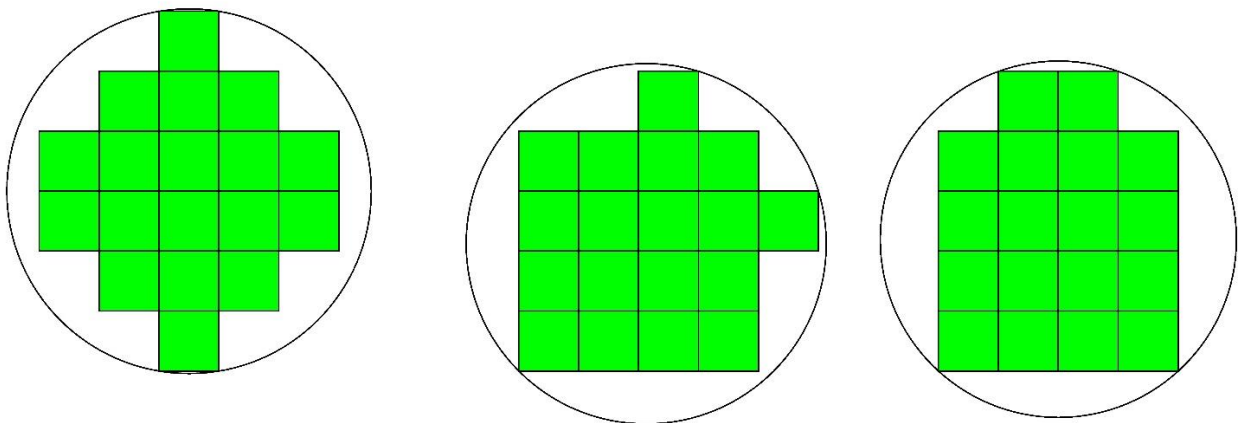
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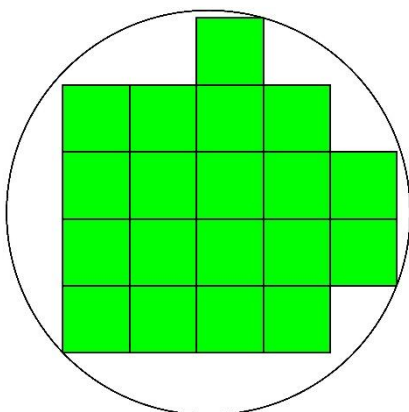
Size 17:



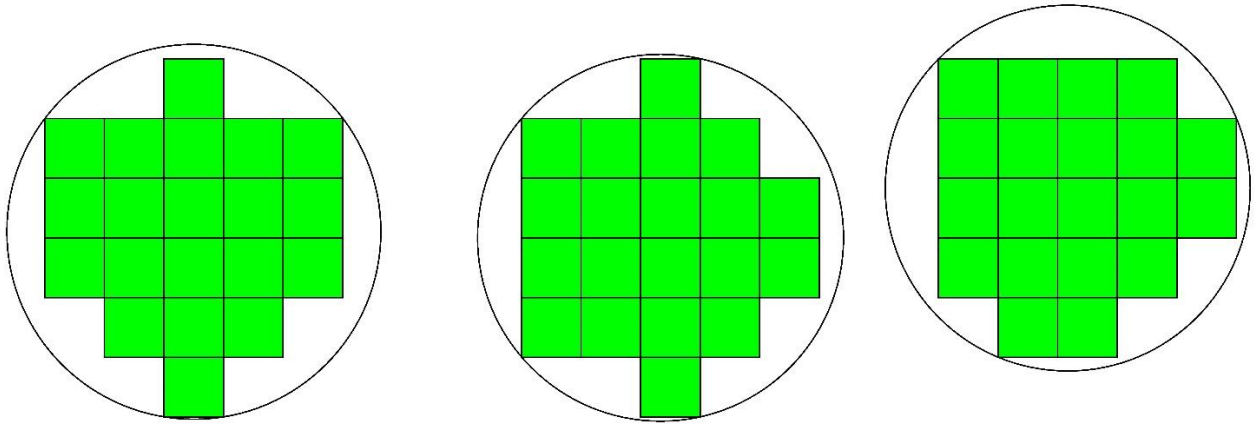
Size 18:



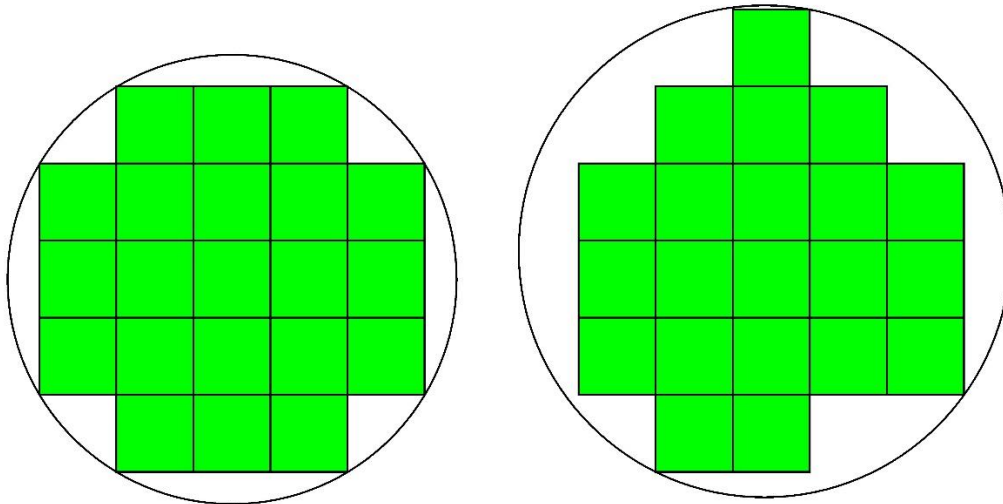
Size 19:



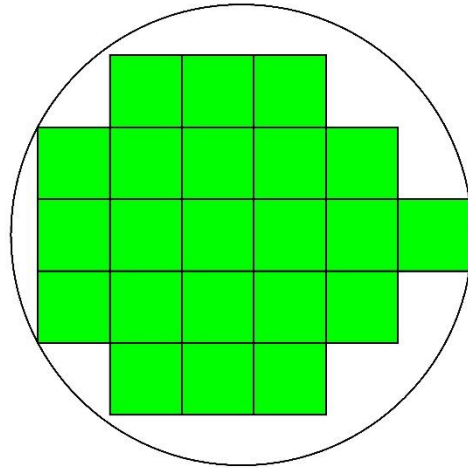
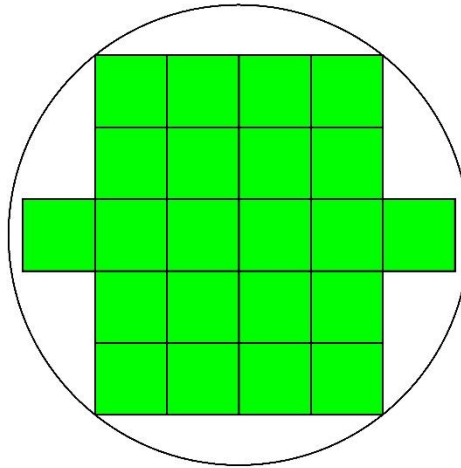
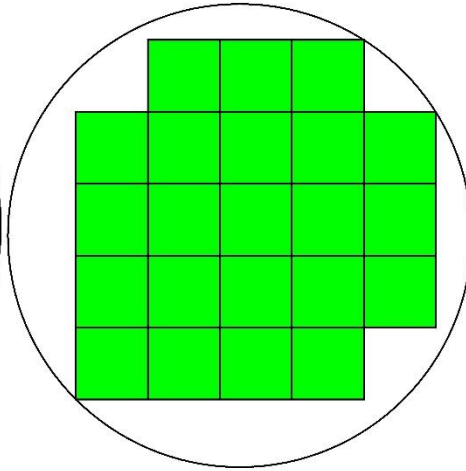
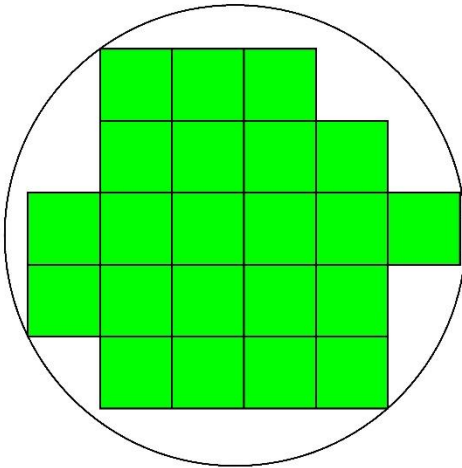
Size 20:



Size 21:



Size 22:



Size 23:

