A225953
Periods of reduced primitive indefinite binary quadratic forms with discriminant D = D(n) = A079896(n).
The number of such periods is the class number given in A087048 . The length of the periods is given as a list. Their sum gives the number of reduced primitive forms for D(n) shown in A082174 .
One is led from one primitive reduced form F([a,b,c],(x,y)) = a x^2 + b x y + c y^2 to another one F([a',b',c'],(x',y')) by the proper equivalence transformation between A:= matrix([a,b/2],[b/2,c]) and A':= matrix([a',b'/2],[b'/2,c']) and between vec(x) := (x,y)^T (transposed, to get a column vector) and vec(x') := (x',y')^T according to A' = R^{-1,T} A R^{-1} and vec(x') = R vec(x), with R^{-1} = R^{-1}(t) = matrix([0,-1],[1,t]) , where det R(t) = +1 (proper equivalence) and t is uniquely determined by the requirement to obtain a so called half-reduced form satisfying with f(D):= ceiling(sqrt(D)): f(D) - |2 a| <= b < f(D).
For example in the case D = 89 (treated in the Scholz-Schoeneberg book `` Einf\"uhrung in die Zahlentheorie", Walter de Gruyter, 1973, on p. 116), the form [1,9,-2] is transformed by R^{-1}(-4) into the form [-2, 7, 5], which is a reduced form because it satisfies
b > 0 and f(D) – min(2 |a|, 2|c|) <= b < f(D). Also [1,9,-2] is a primitive reduced form because all members of a period are primitive reduced forms.
The case D= 89 has only one period with 14 primitive reduced forms (see below the row n= 35).
We started there with the period with the form [-4, 3, 5] (not with [1,9,-2] like in the book).
We also use R^{-1} where in this book R(t) is used.
See also the book D. A. Buell, ``Binary Quadratic Forms", 1989, Springer. The table on p. 30, with the periods for n=0, … 19 coincides with this table (up to the order of the forms in the cycles).

n	D (n)	class No.	length	periods
0	5	1	[2]	[[[-1, 1, 1], [1, 1, -1]]]
1	8	1	[2]	[[[-1, 2, 1], [1, 2, -1]]]
2	12	2	[2,2]	[[[-1, 2, 2], [2, 2, -1]], [[1, 2, -2], [-2, 2, 1]]]
3	13	1	[2]	[[[-1, 3, 1], [1, 3, -1]]]
4	17	1	[6]	[[[-2, 1, 2], [2, 3, -1], [-1, 3, 2], [2, 1, -2], [-2, 3, 1], [1, 3, -2]]]
5	20	1	[2]	[[[-1, 4, 1], [1, 4, -1]]]
6	21	2	[2,2]	[[[-1, 3, 3], [3, 3, -1]], [[1, 3, -3], [-3, 3, 1]]]
7	24	2	[2,2]	[[[-1, 4, 2], [2, 4, -1]], [[1, 4, -2], [-2, 4, 1]]]
8	28	2	[4,4]	[[[-2, 2, 3], [3, 4, -1], [-1, 4, 3], [3, 2, -2]], [[2, 2, -3], [-3, 4, 1], [1, 4, -3], [-3, 2, 2]]]
9	29	1	[2]	[[[-1, 5, 1], [1, 5, -1]]]
10	32	2	[2,2]	[[[-1, 4, 4], [4, 4, -1]], [[1, 4, -4], [-4, 4, 1]]]
11	33	2	[4,4]	[[[-2, 3, 3], [3, 3, -2], [-2, 5, 1], [1, 5, -2]], [[2, 3, -3], [-3, 3, 2], [2, 5, -1], [-1, 5, 2]]]
12	37	1	[6]	[[[-3, 1, 3], [3, 5, -1], [-1, 5, 3], [3, 1, -3], [-3, 5, 1], [1, 5, -3]]]
13	40	2	[6,2]	[[[-3, 2, 3], [3, 4, -2], [-2, 4, 3], [3, 2, -3], [-3, 4, 2], [2, 4, -3]], [[-1, 6, 1], [1, 6, -1]]]
14	41	1	[10]	[[[-2, 3, 4], [4, 5, -1], [-1, 5, 4], [4, 3, -2], [-2, 5, 2], [2, 3, -4], [-4, 5, 1], [1, 5, -4], [-4, 3, 2], [2, 5, -2]]]
15	44	2	[2,2]	[[[-1, 6, 2], [2, 6, -1]], [[1, 6, -2], [-2, 6, 1]]]
16	45	2	[2,2]	[[[-1, 5, 5], [5, 5, -1]], [[1, 5, -5], [-5, 5, 1]]]
17	48	2	[2,2]	[[[-1, 6, 3], [3, 6, -1]], [[1, 6, -3], [-3, 6, 1]]]
18	52	1	[10]	[[[-3, 2, 4], [4, 6, -1], [-1, 6, 4], [4, 2, -3], [-3, 4, 3], [3, 2, -4], [-4, 6, 1], [1, 6, -4], [-4, 2, 3], [3, 4, -3]]]

19	53	1	[2]	[[[-1, 7, 1], [1, 7, -1]]]
20	56	2	[4,4]	[[[-2, 4, 5], [5, 6, -1], [-1, 6, 5], [5, 4, -2]], [[2, 4, -5], [-5, 6, 1], [1, 6, -5], [-5, 4, 2]]]
21	57	2	[6,6]	[[[-3, 3, 4], [4, 5, -2], [-2, 7, 1], [1, 7, -2], [-2, 5, 4], [4, 3, -3]], [[3, 3, -4], [-4, 5, 2], [2, 7, -1], [-1, 7, 2], [2, 5, -4], [-4, 3, 3]]]
22	60	4	[2,2,2,2]	[[[-1, 6, 6], [6, 6, -1]], [[1, 6, -6], [-6, 6, 1]], [[-2, 6, 3], [3, 6, -2]], [[2, 6, -3], [-3, 6, 2]]]
23	61	1	[6]	[[[-3, 5, 3], [3, 7, -1], [-1, 7, 3], [3, 5, -3], [-3, 7, 1], [1, 7, -3]]]
24	65	2	[6,6]	[[[-4, 1, 4], [4, 7, -1], [-1, 7, 4], [4, 1, -4], [-4, 7, 1], [1, 7, -4]], [[-2, 5, 5], [5, 5, -2], [-2, 7, 2], [2, 5, -5], [-5, 5, 2], [2, 7, -2]]]
25	68	1	[2]	[[[-1, 8, 1], [1, 8, -1]]]
26	69	2	[4,4]	[[[-3, 3, 5], [5, 7, -1], [-1, 7, 5], [5, 3, -3]], [[3, 3, -5], [-5, 7, 1], [1, 7, -5], [-5, 3, 3]]]
27	72	2	[2,2]	[[[-1, 8, 2], [2, 8, -1]], [[1, 8, -2], [-2, 8, 1]]]
28	73	1	[18]	[[[-4, 3, 4], [4, 5, -3], [-3, 7, 2], [2, 5, -6], [-6, 7, 1], [1, 7, -6], [-6, 5, 2], [2, 7, -3], [-3, 5, 4], [4, 3, -4], [-4, 5, 3], [3, 7, -2], [-2, 5, 6], [6, 7, -1], [-1, 7, 6], [6, 5, -2], [-2, 7, 3], [3, 5, -4]]]
29	76	2	[6,6]	[[[-3, 4, 5], [5, 6, -2], [-2, 6, 5], [5, 4, -3], [-3, 8, 1], [1, 8, -3]], [[3, 4, -5], [-5, 6, 2], [2, 6, -5], [-5, 4, 3], [3, 8, -1], [-1, 8, 3]]]
30	77	2	[2,2]	[[[-1, 7, 7], [7, 7, -1]], [[1, 7, -7], [-7, 7, 1]]]
31	80	2	[2,2]	[[[-1, 8, 4], [4, 8, -1]], [[1, 8, -4], [-4, 8, 1]]]
32	84	2	[6,6]	[[[-4, 2, 5], [5, 8, -1], [-1, 8, 5], [5, 2, -4], [-4, 6, 3], [3, 6, -4]], [[4, 2, -5], [-5, 8, 1], [1, 8, -5], [-5, 2, 4], [4, 6, -3], [-3, 6, 4]]]
33	85	2	[6,2]	[[[-3, 5, 5], [5, 5, -3], [-3, 7, 3], [3, 5, -5], [-5, 5, 3], [3, 7, -3]], [[-1, 9, 1], [1, 9, -1]]]
34	88	2	[6,6]	[[[-3, 4, 6], [6, 8, -1], [-1, 8, 6], [6, 4, -3], [-3, 8, 2], [2, 8, -3]], [[3, 4, -6], [-6, 8, 1], [1, 8, -6], [-6, 4, 3], [3, 8, -2], [-2, 8, 3]]]
35	89	1	[14]	[[[-4, 3, 5], [5, 7, -2], [-2, 9, 1], [1, 9, -2], [-2, 7, 5], [5, 3, -4], [-4, 5, 4], [4, 3, -5], [-5, 7, 2], [2, 9, -1], [-1, 9, 2], [2, 7, -5], [-5, 3, 4], [4, 5, -4]]]
36	92	2	[4,4]	[[[-2, 6, 7], [7, 8, -1], [-1, 8, 7], [7, 6, -2]], [[2, 6, -7], [-7, 8, 1], [1, 8, -7], [-7, 6, 2]]]
37	93	2	[2,2]	[[[-1, 9, 3], [3, 9, -1]], [[1, 9, -3], [-3, 9, 1]]]
38	96	4	[4,4,2,2]	[[[-4, 4, 5], [5, 6, -3], [-3, 6, 5], [5, 4, -4]], [[4, 4, -5], [-5, 6, 3], [3, 6, -5], [-5, 4, 4]], [[-1, 8, 8], [8, 8, -1]], [[1, 8, -8], [-8, 8, 1]]]
39	97	1	[18]	[[[-3, 5, 6], [6, 7, -2], [-2, 9, 2], [2, 7, -6], [-6, 5, 3], [3, 7, -4], [-4, 9, 1], [1, 9, -4], [-4, 7, 3], [3, 5, -6], [-6, 7, 2], [2, 9, -2], [-2, 7, 6], [6, 5, -3], [-3, 7, 4], [4, 9, -1], [-1, 9, 4], [4, 7, -3]]]
40	101	1	[6]	[[[-5, 1, 5], [5, 9, -1], [-1, 9, 5], [5, 1, -5], [-5, 9, 1], [1, 9, -5]]]
41	104	2	[6,2]	[[[-5, 2, 5], [5, 8, -2], [-2, 8, 5], [5, 2, -5], [-5, 8, 2], [2, 8, -5]], [[-1, 10, 1], [1, 10, -1]]]
42	105	4	[6,6,4,4]	[[[-4, 3, 6], [6, 9, -1], [-1, 9, 6], [6, 3, -4], [-4, 5, 5], [5, 5, -4]], [[4, 3, -6], [-6, 9, 1], [1, 9, -6], [-6, 3, 4], [4, 5, -5], [-5, 5, 4]], [[-2, 7, 7], [7, 7, -2], [-2, 9, 3], [3, 9, -2]], [[2, 7, -7], [-7, 7, 2], [2, 9, -3], [-3, 9, 2]]
43	108	2	[2,2]	[[[-1, 10, 2], [2, 10, -1]], [[1, 10, -2], [-2, 10, 1]]]

44	109	1	[14]	[[[-5, 3, 5], [5, 7, -3], [-3, 5, 7], [7, 9, -1], [-1, 9, 7], [7, 5, -3], [-3, 7, 5], [5, 3, -5], [-5, 7, 3], [3, 5, -7], [-7, 9, 1], [1, 9, -7], [-7, 5, 3], [3, 7, -5]]]
45	112	2	[4,4]	[[[-3, 8, 4], [4, 8, -3], [-3, 10, 1], [1, 10, -3]], [[3, 8, -4], [-4, 8, 3], [3, 10, -1], [-1, 10, 3]]]
46	113	1	[14]	[[[-2, 7, 8], [8, 9, -1], [-1, 9, 8], [8, 7, -2], [-2, 9, 4], [4, 7, -4], [-4, 9, 2], [2, 7, -8], [-8, 9, 1], [1, 9, -8], [-8, 7, 2], [2, 9, -4], [-4, 7, 4], [4, 9, -2]]]
47	116	1	[10]	[[[-5, 4, 5], [5, 6, -4], [-4, 10, 1], [1, 10, -4], [-4, 6, 5], [5, 4, -5], [-5, 6, 4], [4, 10, -1], [-1, 10, 4], [4, 6, -5]]]
48	117	2	[2,2]	[[[-1, 9, 9], [9, 9, -1]], [[1, 9, -9], [-9, 9, 1]]]
49	120	4	[4,4,2,2]	[[[-3, 6, 7], [7, 8, -2], [-2, 8, 7], [7, 6, -3]], [[3, 6, -7], [-7, 8, 2], [2, 8, -7], [-7, 6, 3]], [[-1, 10, 5], [5, 10, -1]], [[1, 10, -5], [-5, 10, 1]]]
50	124	2	[8,8]	[[[-5, 2, 6], [6, 10, -1], [-1, 10, 6], [6, 2, -5], [-5, 8, 3], [3, 10, -2], [-2, 10, 3], [3, 8, -5]], [[5, 2, -6], [-6, 10, 1], [1, 10, -6], [-6, 2, 5], [5, 8, -3], [-3, 10, 2], [2, 10, -3], [-3, 8, 5]]]
51	125	1	[2]	[[[-1, 11, 1], [1, 11, -1]]]
52	128	2	[4,4]	[[[-4, 4, 7], [7, 10, -1], [-1, 10, 7], [7, 4, -4]], [[4, 4, -7], [-7, 10, 1], [1, 10, -7], [-7, 4, 4]]]
53	129	2	[10,10]	[[[-5, 3, 6], [6, 9, -2], [-2, 11, 1], [1, 11, -2], [-2, 9, 6], [6, 3, -5], [-5, 7, 4], [4, 9, -3], [-3, 9, 4], [4, 7, -5]], [[5, 3, -6], [-6, 9, 2], [2, 11, -1], [-1, 11, 2], [2, 9, -6], [-6, 3, 5], [5, 7, -4], [-4, 9, 3], [3, 9, -4], [-4, 7, 5]]]
54	132	2	[4,4]	[[[-3, 6, 8], [8, 10, -1], [-1, 10, 8], [8, 6, -3]], [[3, 6, -8], [-8, 10, 1], [1, 10, -8], [-8, 6, 3]]]
55	133	2	[4,4]	[[[-3, 7, 7], [7, 7, -3], [-3, 11, 1], [1, 11, -3]], [[3, 7, -7], [-7, 7, 3], [3, 11, -1], [-1, 11, 3]]]
56	136	4	[6,6,4,4]	[[[-5, 4, 6], [6, 8, -3], [-3, 10, 3], [3, 8, -6], [-6, 4, 5], [5, 6, -5]], [[5, 4, -6], [-6, 8, 3], [3, 10, -3], [-3, 8, 6], [6, 4, -5], [-5, 6, 5]], [[-2, 8, 9], [9, 10, -1], [-1, 10, 9], [9, 8, -2]], [[2, 8, -9], [-9, 10, 1], [1, 10, -9], [-9, 8, 2]]
57	137	1	[14]	[[[-4, 5, 7], [7, 9, -2], [-2, 11, 2], [2, 9, -7], [-7, 5, 4], [4, 11, -1], [-1, 11, 4], [4, 5, -7], [-7, 9, 2], [2, 11, -2], [-2, 9, 7], [7, 5, -4], [-4, 11, 1], [1, 11, -4]]]
58	140,	4	[2,2,2,2]	[[[-1, 10, 10], [10, 10, -1]], [[1, 10, -10], [-10, 10, 1]], [[-2, 10, 5], [5, 10, -2]], [[2, 10, -5], [-5, 10, 2]]]
59	141	2	[4,4]	[[[-3, 9, 5], [5, 11, -1], [-1, 11, 5], [5, 9, -3]], [[3, 9, -5], [-5, 11, 1], [1, 11, -5], [-5, 9, 3]]]
60	145	4	[10,6,6,6]	[[[-5, 5, 6], [6, 7, -4], [-4, 9, 4], [4, 7, -6], [-6, 5, 5], [5, 5, -6], [-6, 7, 4], [4, 9, -4], [-4, 7, 6], [6, 5, -5]], [[-3, 7, 8], [8, 9, -2], [-2, 11, 3], [3, 7, -8], [-8, 9, 2], [2, 11, -3]], [[-6, 1, 6], [6, 11, -1], [-1, 11, 6], [6, 1, -6], [-6, 11, 1], [1, 11, -6]], [[-8, 7, 3], [3, 11, -2], [-2, 9, 8], [8, 7, -3], [-3, 11, 2], [2, 9, -8]]]

61	148	3	[6,6,2]	[[[-4, 6, 7], [7, 8, -3], [-3, 10, 4], [4, 6, -7], [-7, 8, 3], [3, 10, -4]], [[-7, 6, 4], [4, 10, -3], [-3, 8, 7], [7, 6, -4], [-4, 10, 3], [3, 8, -7]], [[-1, 12, 1], [1, 12, -1]]]
62	149	1	[10]	[[[-5, 3, 7], [7, 11, -1], [-1, 11, 7], [7, 3, -5], [-5, 7, 5], [5, 3, -7], [-7, 11, 1], [1, 11, -7], [-7, 3, 5], [5, 7, -5]]]
63	152	2	[2,2]	[[[-1, 12, 2], [2, 12, -1]], [[1, 12, -2], [-2, 12, 1]]]
64	153	2	[8,8]	[[[-4, 5, 8], [8, 11, -1], [-1, 11, 8], [8, 5, -4], [-4, 11, 2], [2, 9, -9], [-9, 9, 2], [2, 11, -4]], [[4, 5, -8], [-8, 11, 1], [1, 11, -8], [-8, 5, 4], [4, 11, -2], [-2, 9, 9], [9, 9, -2], [-2, 11, 4]]]
65	156	4	[6,6,2,2]	[[[-5, 4, 7], [7, 10, -2], [-2, 10, 7], [7, 4, -5], [-5, 6, 6], [6, 6, -5]], [[5, 4, -7], [-7, 10, 2], [2, 10, -7], [-7, 4, 5], [5, 6, -6], [-6, 6, 5]], [[-1, 12, 3], [3, 12, -1]], [[1, 12, -3], [-3, 12, 1]]]
66	157	1	[10]	[[[-3, 7, 9], [9, 11, -1], [-1, 11, 9], [9, 7, -3], [-3, 11, 3], [3, 7, -9], [-9, 11, 1], [1, 11, -9], [-9, 7, 3], [3, 11, -3]]]
67	160	4	[4,4,2,2]	[[[-3, 8, 8], [8, 8, -3], [-3, 10, 5], [5, 10, -3]], [[3, 8, -8], [-8, 8, 3], [3, 10, -5], [-5, 10, 3]], [[-1, 12, 4], [4, 12, -1]], [[1, 12, -4], [-4, 12, 1]]]
68	161	2	[10,10]	[[[-4, 7, 7], [7, 7, -4], [-4, 9, 5], [5, 11, -2], [-2, 9, 10], [10, 11, -1], [-1, 11, 10], [10, 9, -2], [-2, 11, 5], [5, 9, -4]], [[4, 7, -7], [-7, 7, 4], [4, 9, -5], [-5, 11, 2], [2, 9, -10], [-10, 11, 1], [1, 11, -10], [-10, 9, 2], [2, 11, -5], [-5, 9, 4]]]
69	164	1	[6]	[[[-5, 8, 5], [5, 12, -1], [-1, 12, 5], [5, 8, -5], [-5, 12, 1], [1, 12, -5]]]
70	165	4	[4,4,2,2]	[[[-5, 5, 7], [7, 9, -3], [-3, 9, 7], [7, 5, -5]], [[5, 5, -7], [-7, 9, 3], [3, 9, -7], [-7, 5, 5]], [[-1, 11, 11], [11, 11, -1]], [[1, 11, -11], [-11, 11, 1]]]
71	168	4	[2,2,2,2]	[[[-1, 12, 6], [6, 12, -1]], [[1, 12, -6], [-6, 12, 1]], [[-2, 12, 3], [3, 12, -2]], [[2, 12, -3], [-3, 12, 2]]]
72	172	2	[10,10]	[[[-6, 2, 7], [7, 12, -1], [-1, 12, 7], [7, 2, -6], [-6, 10, 3], [3, 8, -9], [-9, 10, 2], [2, 10, -9], [-9, 8, 3], [3, 10, -6]], [[6, 2, -7], [-7, 12, 1], [1, 12, -7], [-7, 2, 6], [6, 10, -3], [-3, 8, 9], [9, 10, -2], [-2, 10, 9], [9, 8, -3], [-3, 10, 6]]]
73	173	1	[2]	[[[-1, 13, 1], [1, 13, -1]]]
74	176	2	[8,8]	[[[-5, 4, 8], [8, 12, -1], [-1, 12, 8], [8, 4, -5], [-5, 6, 7], [7, 8, -4], [-4, 8, 7], [7, 6, -5]], [[5, 4, -8], [-8, 12, 1], [1, 12, -8], [-8, 4, 5], [5, 6, -7], [-7, 8, 4], [4, 8, -7], [-7, 6, 5]]]
75	177	2	[12,12]	[[[-6, 3, 7], [7, 11, -2], [-2, 13, 1], [1, 13, -2], [-2, 11, 7], [7, 3, -6], [-6, 9, 4], [4, 7, -8], [-8, 9, 3], [3, 9, -8], [-8, 7, 4], [4, 9, -6]], [[6, 3, -7], [-7, 11, 2], [2, 13, -1], [-1, 13, 2], [2, 11, -7], [-7, 3, 6], [6, 9, -4], [-4, 7, 8], [8, 9, -3], [-3, 9, 8], [8, 7, -4], [-4, 9, 6]]]
76	180	2	[6,6]	[[[-4, 6, 9], [9, 12, -1], [-1, 12, 9], [9, 6, -4], [-4, 10, 5], [5, 10, -4]], [[4, 6, -9], [-9, 12, 1], [1, 12, -9], [-9, 6, 4], [4, 10, -5], [-5, 10, 4]]]

77	181	1	[10]	[[[-5, 9, 5], [5, 11, -3], [-3, 13, 1], [1, 13, -3], [-3, 11, 5], [5, 9, -5], [-5, 11, 3], [3, 13, -1], [-1, 13, 3], [3, 11, -5]]]
78	184	2	[12,12]	[[[-6, 4, 7], [7, 10, -3], [-3, 8, 10], [10, 12, -1], [-1, 12, 10], [10, 8, -3], [-3, 10, 7], [7, 4, -6], [-6, 8, 5], [5, 12, -2], [-2, 12, 5], [5, 8, -6]], [[6, 4, -7], [-7, 10, 3], [3, 8, -10], [-10, 12, 1], [1, 12, -10], [-10, 8, 3], [3, 10, -7], [-7, 4, 6], [6, 8, -5], [-5, 12, 2], [2, 12, -5], [-5, 8, 6]]]
79	185	2	[10,6]	[[[-5, 5, 8], [8, 11, -2], [-2, 13, 2], [2, 11, -8], [-8, 5, 5], [5, 5, -8], [-8, 11, 2], [2, 13, -2], [-2, 11, 8], [8, 5, -5]], [[-4, 11, 4], [4, 13, -1], [-1, 13, 4], [4, 11, -4], [-4, 13, 1], [1, 13, -4]]]
80	188	2	[4,4]	[[[-2, 10, 11], [11, 12, -1], [-1, 12, 11], [11, 10, -2]], [[2, 10, -11], [-11, 12, 1], [1, 12, -11], [-11, 10, 2]]]
81	189	2	[4,4]	[[[-5, 7, 7], [7, 7, -5], [-5, 13, 1], [1, 13, -5]], [[5, 7, -7], [-7, 7, 5], [5, 13, -1], [-1, 13, 5]]]
82	192	4	[2,2,2,2]	[[[-1, 12, 12], [12, 12, -1]], [[1, 12, -12], [-12, 12, 1]], [[-3, 12, 4], [4, 12, -3]], [[3, 12, -4], [-4, 12, 3]]]
83	193	1	[30]	[[[-6, 5, 7], [7, 9, -4], [-4, 7, 9], [9, 11, -2], [-2, 13, 3], [3, 11, -6], [-6, 13, 1], [1, 13, -6], [-6, 11, 3], [3, 13, -2], [-2, 11, 9], [9, 7, -4], [-4, 9, 7], [7, 5, -6], [-6, 7, 6], [6, 5, -7], [-7, 9, 4], [4, 7, -9], [-9, 11, 2], [2, 13, -3], [-3, 11, 6], [6, 13, -1], [-1, 13, 6], [6, 11, -3], [-3, 13, 2], [2, 11, -9], [-9, 7, 4], [4, 9, -7], [-7, 5, 6], [6, 7, -6]]]
84	197	1	[6]	[[[-7, 1, 7], [7, 13, -1], [-1, 13, 7], [7, 1, -7], [-7, 13, 1], [1, 13, -7]]]]
85	200	2	[6,2]	[[[-7, 2, 7], [7, 12, -2], [-2, 12, 7], [7, 2, -7], [-7, 12, 2], [2, 12, -7]], [[-1, 14, 1], [1, 14, -1]]]
86	201	2	[14,14]	[[[-6, 3, 8], [8, 13, -1], [-1, 13, 8], [8, 3, -6], [-6, 9, 5], [5, 11, -4],[-4, 13, 2], [2, 11, -10], [-10, 9, 3], [3, 9, -10], [-10, 11, 2], [2, 13, -4], [-4, 11, 5], [5, 9, -6]], [[6, 3, -8], [-8, 13, 1], [1, 13, -8], [-8, 3, 6], [6, 9, -5], [-5, 11, 4], [4, 13, -2], [-2, 11, 10], [10, 9, -3], [-3, 9, 10], [10, 11, -2], [-2, 13, 4], [4, 11, -5], [-5, 9, 6]]]
87	204	4	[6,6,2,2]	[[[-6, 6, 7], [7, 8, -5], [-5, 12, 3], [3, 12, -5], [-5, 8, 7], [7, 6, -6]], [[6, 6, -7], [-7, 8, 5], [5, 12, -3], [-3, 12, 5], [5, 8, -7], [-7, 6, 6]], [[-1, 14, 2], [2, 14, -1]], [[1, 14, -2], [-2, 14, 1]]]
88	205	4	[4,4,4,4]	[[[-7, 3, 7], [7, 11, -3], [-3, 13, 3], [3, 11, -7]], [[7, 3, -7], [-7, 11, 3], [3, 13, -3], [-3, 11, 7]], [[-5, 5, 9], [9, 13, -1], [-1, 13, 9], [9, 5, -5]], [[5, 5, -9], [-9, 13, 1], [1, 13, -9], [-9, 5, 5]]]
89	208	2	[6,6]	[[[-4, 8, 9], [9, 10, -3], [-3, 14, 1], [1, 14, -3], [-3, 10, 9], [9, 8, -4]], [[4, 8, -9], [-9, 10, 3], [3, 14, -1], [-1, 14, 3], [3, 10, -9], [-9, 8, 4]]]
90	209	2	[12,12]	[[[-4, 7, 10], [10, 13, -1], [-1, 13, 10], [10, 7, -4], [-4, 9, 8], [8, 7, -5], [-5, 13, 2], [2, 11, -11], [-11, 11, 2], [2, 13, -5], [-5, 7, 8], [8, 9, -4]], [[4, 7, -10], [-10, 13, 1], [1, 13, -10], [-10, 7, 4], [4, 9, -8], [-8, 7, 5], [5, 13, -2], [-2, 11, 11], [11, 11, -2], [-2, 13, 5], [5, 7, -8], [-8, 9, 4]]]
91	212	1	[10]	[[[-7, 4, 7], [7, 10, -4], [-4, 14, 1], [1, 14, -4], [-4, 10, 7], [7, 4, -7], [-7, 10, 4], [4, 14, -1], [-1, 14, 4], [4, 10, -7]]]
92	213	2	[4,4]	[[[-3, 9, 11], [11, 13, -1], [-1, 13, 11], [11, 9, -3]],

				[[3, 9, -11], [-11, 13, 1], [1, 13, -11], [-11, 9, 3]]]
93	216	2	[6,6]	[[[-5, 6, 9], [9, 12, -2], [-2, 12, 9], [9, 6, -5], [-5, 14, 1], [1, 14, -5]], [[5, 6, -9], [-9, 12, 2], [2, 12, -9], [-9, 6, 5], [5, 14, -1], [-1, 14, 5]]]
94	217	2	[16,16]	[[[-6, 5, 8], [8, 11, -3], [-3, 13, 4], [4, 11, -6], [-6, 13, 2], [2, 11, -12], [-12, 13, 1], [1, 13, -12], [-12, 11, 2], [2, 13, -6], [-6, 11, 4], [4, 13, -3], [-3, 11, 8], [8, 5, -6], [-6, 7, 7], [7, 7, -6]], [[6, 5, -8], [-8, 11, 3], [3, 13, -4], [-4, 11, 6], [6, 13, -2], [-2, 11, 12], [12, 13, -1], [-1, 13, 12], [12, 11, -2], [-2, 13, 6], [6, 11, -4], [-4, 13, 3], [3, 11, -8], [-8, 5, 6], [6, 7, -7], [-7, 7, 6]]]
95	220	4	[4,4,4,4]	[[[-3, 10, 10], [10, 10, -3], [-3, 14, 2], [2, 14, -3]], [[3, 10, -10], [-10, 10, 3], [3, 14, -2], [-2, 14, 3]], [[-5, 10, 6], [6, 14, -1], [-1, 14, 6], [6, 10, -5]], [[5, 10, -6], [-6, 14, 1], [1, 14, -6], [-6, 10, 5]]]
96	221	4	[4,4,2,2]	[[[-7, 5, 7], [7, 9, -5], [-5, 11, 5], [5, 9, -7]], [[7, 5, -7], [-7, 9, 5], [5, 11, -5], [-5, 9, 7]], [[-1, 13, 13], [13, 13, -1]], [[1, 13, -13], [-13, 13, 1]]]
97	224	4	[4,4,2,2]	[[[-5, 8, 8], [8, 8, -5], [-5, 12, 4], [4, 12, -5]], [[5, 8, -8], [-8, 8, 5], [5, 12, -4], [-4, 12, 5]], [[-1, 14, 7], [7, 14, -1]], [[1, 14, -7], [-7, 14, 1]]]
98	228	2	[6,6]	[[[-7, 2, 8], [8, 14, -1], [-1, 14, 8], [8, 2, -7], [-7, 12, 3], [3, 12, -7]], [[7, 2, -8], [-8, 14, 1], [1, 14, -8], [-8, 2, 7], [7, 12, -3], [-3, 12, 7]]]
99	229	3	[6,6,2]	[[[-5, 7, 9], [9, 11, -3], [-3, 13, 5], [5, 7, -9], [-9, 11, 3], [3, 13, -5]], [[-9, 7, 5], [5, 13, -3], [-3, 11, 9], [9, 7, -5], [-5, 13, 3], [3, 11, -9]], [[-1, 15, 1], [1, 15, -1]]]
100	232	2	[14,10]	[[[-6, 4, 9], [9, 14, -1], [-1, 14, 9], [9, 4, -6], [-6, 8, 7], [7, 6, -7], [-7, 8, 6], [6, 4, -9], [-9, 14, 1], [1, 14, -9], [-9, 4, 6], [6, 8, -7], [-7, 6, 7], [7, 8, -6]], [[-3, 10, 11], [11, 12, -2], [-2, 12, 11], [11, 10, -3], [-3, 14, 3], [3, 10, -11], [-11, 12, 2], [2, 12, -11], [-11, 10, 3], [3, 14, -3]]]

etc.