

Different Types of Magic Squares of Order 14

*Pdf file of 3354 magic squares of order 14
is available at author's sites:
<https://numbers-magic.com/?p=2640>*

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Abstract

*It is revised version of author's previous work [44]. It brings new ideas of construction of magic squares. This work is for the order 14. The new ideas used to bring these magic square are: **bordered magic rectangles, bordered double digits magic rectangles, cornered magic rectangles, striped magic rectangles**, etc. When the length and width are equal these becomes as magic squares. Another idea used is of algebraic formula $(a + b)^2$. Here we consider small blocks of magic squares and magic rectangles, such as a^2 , b^2 , $a \times b$ and $b \times a$. These are available as pdf file at author's site, whose links are given above. For previous works of orders 6, 8, 10 and 12 refer Taneja[3, 4, 44]*

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1 Introduction

In this work, we shall bring magic squares of orders 6, 8, 10 and 12. There are written in different styles and designs. Moreover, these are based on different kinds of new aspects of magic rectangles. These includes:

- (i) Bordered Magic Rectangles.
- (ii) Bordered Double Digits Magic Rectangles.
- (iii) Cornered Magic Rectangles.
- (iv) Striped Magic Rectangles.

(v) Algebraic Formula Type $(a + b)^2$.

The above items are not known in the literature of magic squares. These are author's recent ideas in construction of magic squares. Let's understand one by one the above 5-items.

1.1 Bordered Magic Rectangle

Bordered magic squares are well known in the literature. See below an example of **bordered magic square** of order 10.

										505
91	84	86	98	18	16	14	4	2	92	505
13	26	20	80	82	69	31	71	25	88	505
11	23	64	62	35	68	36	38	78	90	505
7	24	34	49	54	43	56	67	77	94	505
1	29	40	44	55	50	53	61	72	100	505
89	79	42	58	45	52	47	59	22	12	505
93	74	60	51	48	57	46	41	27	8	505
95	73	63	39	66	33	65	37	28	6	505
96	76	81	21	19	32	70	30	75	5	505
9	17	15	3	83	85	87	97	99	10	505
505	505	505	505	505	505	505	505	505	505	505

Bordered magic rectangles are not very well known in the literature. See below two examples:

Example 1. Below are two examples of **bordered magic rectangle** of orders 6×10 and 8×10

10	56	2	14	49	8	6	54	58	48	305	7	4	9	80	78	69	65	14	68	11	405
57	43	16	24	20	17	46	38	40	4	305	76	26	19	63	17	60	54	61	24	5	405
1	19	32	31	35	25	33	27	42	60	305	8	23	51	35	48	29	31	49	58	73	405
50	39	29	30	26	36	28	34	22	11	305	75	53	34	42	40	37	43	47	28	6	405
52	21	45	37	41	44	15	23	18	9	305	2	59	45	39	41	44	38	36	22	79	405
13	5	59	47	12	53	55	7	3	51	305	15	25	32	46	33	52	50	30	56	66	405
183	183	183	183	183	183	183	183	183	183		71	57	62	18	64	21	27	20	55	10	405
											70	77	72	1	3	12	16	67	13	74	405
											324	324	324	324	324	324	324	324	324	324	324

These are known as single digit **bordered** magic rectangles. More **bordered magic rectangles** of similar kind can be constructed using H. White's [1] software. The idea of this work is to use similar kind of small **bordered magic rectangles** to bring magic squares. See below two examples of orders 6 and 10:

						111							260		
24	17	22	16	14	18	111	19	16	52	45	48	15	39	26	260
7	31	5	33	34	1	111	47	23	41	44	22	18	28	37	260
29	27	9	12	26	8	111	14	42	24	21	43	51	38	27	260
2	10	28	25	11	35	111	50	49	13	20	17	46	25	40	260
36	6	32	4	3	30	111	34	31	3	64	4	60	57	7	260
13	20	15	21	23	19	111	35	30	6	11	56	53	10	59	260
111	111	111	111	111	111	111	29	36	63	54	9	12	55	2	260
							32	33	58	1	61	5	8	62	260
							260	260	260	260	260	260	260	260	260

1.2 Bordered Double Digits Magic Rectangles

Above we explained above the bordered magic rectangles are of single digit borders. Here we shall bring double digits bordered magic rectangles. See below few examples.

Example 2. Below is an example of *double digit bordered magic rectangle* of order 6×14 :

11	8	7	71	5	70	69	73	84	23	26	63	13	72	595
74	77	78	14	80	15	16	12	1	62	59	22	76	9	595
66	19	52	42	50	40	41	47	34	37	36	46	24	61	595
65	20	33	43	35	45	44	38	51	48	49	39	57	28	595
10	75	81	27	68	67	21	53	30	3	25	2	79	54	595
29	56	4	58	17	18	64	32	55	82	60	83	6	31	595
255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

The magic rectangle of width 2 are of equal sums. See below:

Based on same idea below are two different ways of writing magic square of order 8.

								260									260
3	1	63	61	60	58	8	6	260	12	57	56	4	2	64	46	19	260
62	64	2	4	5	7	57	59	260	53	8	9	61	63	1	47	18	260
17	48	31	36	25	38	21	44	260	14	51	31	36	25	38	59	6	260
20	45	26	37	32	35	24	41	260	50	15	26	37	32	35	5	60	260
47	18	40	27	34	29	43	22	260	48	17	40	27	34	29	16	49	260
46	19	33	30	39	28	42	23	260	62	3	33	30	39	28	22	43	260
53	55	9	11	16	14	50	52	260	11	54	45	44	24	23	52	7	260
12	10	56	54	49	51	15	13	260	10	55	20	21	41	42	13	58	260
260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260

1.3 Cornered Magic Rectangles

Above we explained **bordered magic rectangles** in two different ways. One with single digits borders and another with double digit borders. Here we shall bring idea of cornered magic rectangles. We shall use same idea of equal sums double digits as in case of bordered double digits but in a little different aspect. See below two examples.

Example 4. Below is an example of *cornered magic rectangle* of order 6×10 :

32	33	31	27	35	25	17	44	51	10	305
29	28	30	34	26	36	39	22	12	49	305
16	23	21	18	37	42	46	41	50	11	305
45	38	40	43	24	19	20	15	2	59	305
58	1	13	55	4	9	8	56	54	47	305
3	60	48	6	57	52	53	5	14	7	305
183	183	183	183	183	183	183	183	183	183	
32	33	31	27	35	25	17	44			244
29	28	30	34	26	36	39	22			244
16	23	21	18	37	42	46	41			244
45	38	40	43	24	19	20	15			244
122	122	122	122	122	122	122	122			
32	33	31	27	35	25					183
29	28	30	34	26	36					183
61	61	61	61	61	61					

Example 5. Below is an example of cornered magic rectangle of order 10×18 :

86	94	88	81	96	82	98	92	97	91	104	77	115	66	148	33	157	24	1629
95	87	93	100	85	99	83	89	84	90	74	107	62	119	34	147	168	13	1629
112	113	70	72	101	71	73	75	78	114	105	102	117	64	154	27	6	175	1629
69	68	111	109	80	110	108	106	103	67	79	76	128	53	31	150	22	159	1629
129	59	55	130	124	120	65	54	49	50	121	125	63	123	139	42	15	166	1629
52	122	126	51	57	61	116	127	132	131	60	56	58	118	48	133	176	5	1629
45	30	146	43	46	137	39	143	41	153	29	144	141	32	134	145	174	7	1629
136	151	35	138	135	44	142	38	140	28	152	37	40	149	36	47	17	164	1629
25	10	12	165	2	20	163	180	4	172	158	8	170	19	21	155	167	178	1629
156	171	169	16	179	161	18	1	177	9	23	173	11	162	160	26	3	14	1629
905	905	905	905	905	905	905	905	905	905	905	905	905	905	905	905	905	905	
86	94	88	81	96	82	98	92	97	91	104	77	115	66	148	33	1448		
95	87	93	100	85	99	83	89	84	90	74	107	62	119	34	147	1448		
112	113	70	72	101	71	73	75	78	114	105	102	117	64	154	27	1448		
69	68	111	109	80	110	108	106	103	67	79	76	128	53	31	150	1448		
129	59	55	130	124	120	65	54	49	50	121	125	63	123	139	42	1448		
52	122	126	51	57	61	116	127	132	131	60	56	58	118	48	133	1448		
45	30	146	43	46	137	39	143	41	153	29	144	141	32	134	145	1448		
136	151	35	138	135	44	142	38	140	28	152	37	40	149	36	47	1448		
724	724	724	724	724	724	724	724	724	724	724	724	724	724	724	724			
86	94	88	81	96	82	98	92	97	91	104	77	115	66	1267				
95	87	93	100	85	99	83	89	84	90	74	107	62	119	1267				
112	113	70	72	101	71	73	75	78	114	105	102	117	64	1267				
69	68	111	109	80	110	108	106	103	67	79	76	128	53	1267				
129	59	55	130	124	120	65	54	49	50	121	125	63	123	1267				
52	122	126	51	57	61	116	127	132	131	60	56	58	118	1267				
543	543	543	543	543	543	543	543	543	543	543	543	543	543	543	543			
86	94	88	81	96	82	98	92	97	91	104	77	1086						
95	87	93	100	85	99	83	89	84	90	74	107	1086						
112	113	70	72	101	71	73	75	78	114	105	102	1086						
69	68	111	109	80	110	108	106	103	67	79	76	1086						
362	362	362	362	362	362	362	362	362	362	362	362	362	362					
86	94	88	81	96	82	98	92	97	91	905								
95	87	93	100	85	99	83	89	84	90	905								
181	181	181	181	181	181	181	181	181	181									

From above examples, we observe that when we remove external double digits borders only in two-sides, still we are left with **cornered magic rectangles**. Sometimes these kinds of **cornered magic rectangles**, we call as **embedded** or **nested cornered magic rectangles**.

More studies on above three types of **magic rectangles** are available at [90]. To calculate these **magic rectangles** using software refer H. White's [1] download page

1.4 Striped Magic Rectangles

We observe from double digits magic rectangles that any order magic rectangles with width 2 are always magic rectangles, i.e., these are of magic rectangles of type 2×4 , 2×6 , 2×8 , etc. But this property is not true for the cornered magic rectangles. Below are few examples where we have cornered magic rectangles with the property that order multiple of two is always a magic rectangle. See below two examples.

Example 6. Below is an example of a *striped cornered magic rectangle* of order 6×14 :

52	47	40	37	42	36	41	50	34	46	58	27	12	73	595
33	38	45	48	43	49	44	35	51	39	60	25	74	11	595
26	66	32	64	65	31	22	28	61	30	29	56	4	81	595
59	19	53	21	20	54	63	57	24	55	23	62	78	7	595
71	69	72	5	6	67	70	3	68	2	1	76	77	8	595
14	16	13	80	79	18	15	82	17	83	84	9	10	75	595
255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

The sums are as follows:

71	69	72	5	6	67	70	3	68	2	1	76	510	12	73	85	58	27	85
14	16	13	80	79	18	15	82	17	83	84	9	510	74	11	85	60	25	85
85	85	85	85	85	85	85	85	85	85	85	85	85	4	81	85	29	56	85
													78	7	85	23	62	85
													77	8	85	170	170	
26	66	32	64	65	31	22	28	61	30	425	10	75	85					
59	19	53	21	20	54	63	57	24	55	425	255	255						
85	85	85	85	85	85	85	85	85	85	85								
52	47	40	37	42	36	41	50	34	46	425								
33	38	45	48	43	49	44	35	51	39	425								
85	85	85	85	85	85	85	85	85	85	85								

Example 7. Below is an example of another *striped cornered magic rectangle* of order 10×12 :

59	61	64	58	68	53	73	48	86	35	18	103	726
62	60	57	63	50	71	76	45	24	97	108	13	726
72	65	54	51	69	52	46	75	22	99	8	113	726
49	56	67	70	55	66	41	80	98	23	104	17	726
74	84	81	39	42	43	44	77	29	92	102	19	726
47	37	40	82	79	78	83	38	34	87	15	106	726
90	26	33	96	94	32	85	28	91	30	115	6	726
31	95	88	25	27	89	36	93	100	21	114	7	726
109	116	2	118	1	4	112	16	107	20	11	110	726
12	5	119	3	120	117	9	105	14	101	10	111	726
605	605	605	605	605	605	605	605	605	605	605	605	

The sums are as follows:

109	116	2	118	1	4	112	16	107	20	605	18	103	121	86	35	121	73	48	121	68	53	121	
12	5	119	3	120	117	9	105	14	101	605	108	13	121	24	97	121	76	45	121	50	71	121	
121	121	121	121	121	121	121	121	121	121	121	8	113	121	22	99	121	46	75	121	69	52	121	
											104	17	121	98	23	121	41	80	121	55	66	121	
90	26	33	96	94	32	85	28	484			102	19	121	29	92	121	44	77	121	242	242		
31	95	88	25	27	89	36	93	484			15	106	121	34	87	121	83	38	121				
121	121	121	121	121	121	121	121	121			115	6	121	91	30	121	363	363					
											114	7	121	100	21	121							
74	84	81	39	42	43	363					11	110	121	484	484								
47	37	40	82	79	78	363					10	111	121										
121	121	121	121	121	121	121					605	605											
72	65	54	51	242		59	61	64	58	242													
49	56	67	70	242		62	60	57	63	242													
121	121	121	121			121	121	121	121														

Based on above idea below are two examples of **striped magic squares**

										505											870		
13	88	93	8	68	33	69	23	38	72	505	59	85	88	58	92	53	41	104	110	35	126	19	870
18	83	95	6	40	61	32	78	63	29	505	86	60	57	87	50	95	100	45	34	111	18	127	870
85	16	5	96	30	71	54	47	22	79	505	96	54	89	51	55	90	44	101	22	123	8	137	870
87	14	7	94	44	57	48	53	58	43	505	49	91	56	94	93	52	107	38	122	23	128	17	870
84	17	90	11	80	21	49	52	59	42	505	98	108	105	43	39	42	97	48	29	116	132	13	870
20	81	10	91	34	67	46	55	74	27	505	47	37	40	102	106	103	46	99	24	121	15	130	870
82	19	92	9	73	28	56	45	60	41	505	114	28	32	120	118	33	109	26	115	30	139	6	870
15	86	12	89	35	66	50	51	36	65	505	31	117	113	25	27	112	36	119	124	21	10	135	870
1	99	98	4	77	62	37	26	25	76	505	133	140	1	142	2	4	136	16	20	131	11	134	870
100	2	3	97	24	39	64	75	70	31	505	12	5	144	3	143	141	9	129	125	14	138	7	870
505	505	505	505	505	505	505	505	505	505	505	79	82	74	61	65	72	78	68	69	75	83	64	870
											66	63	71	84	80	73	67	77	76	70	62	81	870
											870	870	870	870	870	870	870	870	870	870	870	870	870

More studies on striped magic square are available at author's site [2]

1.5 $(a + b)^2$ -Type

In this case, we consider two small magic squares one as a and another as b , then put in between magic rectangles of orders $a \times b$ and $b \times a$. See below two examples of orders 10 and 12.

										505											870		
38	62	36	68	35	64	76	78	21	27	505	48	42	102	104	91	53	93	47	114	32	29	115	870
67	49	54	43	56	34	26	32	69	75	505	45	86	84	57	90	58	60	100	31	113	116	30	870
61	44	55	50	53	40	28	29	72	73	505	46	56	71	76	65	78	89	99	3	6	143	138	870
41	58	45	52	47	60	77	71	30	24	505	101	62	66	77	72	75	83	44	144	11	134	1	870
59	51	48	57	46	42	22	70	31	79	505	51	82	80	67	74	69	63	94	4	133	12	141	870
37	39	65	33	66	63	74	23	80	25	505	96	64	73	70	79	68	81	49	137	136	9	8	870
88	14	89	16	10	86	7	96	1	98	505	95	85	61	88	55	87	59	50	140	10	135	5	870
90	20	83	17	82	11	2	97	8	95	505	98	103	43	41	54	92	52	97	7	139	2	142	870
9	81	18	84	19	92	100	3	94	5	505	16	129	19	124	20	121	128	23	39	108	33	110	870
15	87	12	85	91	13	93	6	99	4	505	130	15	22	27	117	120	26	123	34	109	40	107	870
505	505	505	505	505	505	505	505	505	505	505	131	14	127	118	28	25	119	18	112	35	106	37	870
											13	132	122	21	125	24	17	126	105	38	111	36	870
											870	870	870	870	870	870	870	870	870	870	870	870	870

Based on above five ideas, below are magic squares of orders 6, 8, 10 and 12.

2 Magic Squares of Order 14

In this section we have written 3354 magic squares of order 14. These are based on 5 items given above. Since there are 3354 magic squares of order 14, we have divided them in 10 parts. Below are details.

2.1 Part 1. General or Mixed Magic Squares

This part give some general magic square of order 14. Below are only 6 examples. The examples are in a pdf file attached below:

5	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
85	111	87	109	89	107	106	92	104	94	95	101	100	99	1379
82	83	113	116	79	118	128	69	149	48	170	27	19	178	1379
115	114	84	81	74	123	71	126	148	49	172	25	189	8	1379
117	124	75	78	120	77	133	64	144	53	40	157	12	185	1379
80	73	122	119	121	76	130	67	56	141	29	168	181	16	1379
62	65	127	134	131	72	68	129	137	60	33	164	4	193	1379
135	132	70	63	66	125	61	136	46	151	163	34	187	10	1379
139	45	147	142	54	59	150	52	51	146	153	44	13	184	1379
58	152	50	55	143	138	47	145	57	140	155	42	175	22	1379
28	35	161	166	160	26	41	158	43	167	32	165	176	21	1379
169	162	36	31	37	171	156	39	154	30	38	159	20	177	1379
180	192	186	23	1	6	24	183	182	7	3	195	18	179	1379
17	5	11	174	196	191	173	14	15	190	194	2	188	9	1379
112	86	110	88	108	90	91	105	93	103	102	96	97	98	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

8	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
155	192	164	32	184	168	43	182	22	10	28	2	19	178	1379
42	5	33	165	13	29	154	15	175	187	169	195	11	186	1379
180	17	152	65	68	57	131	139	50	126	67	130	177	20	1379
173	24	45	132	129	140	66	58	147	71	55	142	189	8	1379
25	172	138	59	81	115	114	84	80	117	62	135	158	39	1379
6	191	47	150	116	82	83	113	119	78	148	49	30	167	1379
159	38	136	61	73	123	122	76	118	79	134	63	166	31	1379
161	36	70	127	124	74	75	121	77	120	125	72	27	170	1379
37	160	146	51	48	64	144	60	128	151	141	52	23	174	1379
193	4	54	143	149	133	53	137	69	46	56	145	185	12	1379
44	153	41	26	163	18	181	176	3	1	162	188	183	40	1379
7	190	156	171	34	179	16	21	194	196	35	9	14	157	1379
85	111	99	109	89	107	106	92	104	94	95	101	87	100	1379
112	86	98	88	108	90	91	105	93	103	102	96	110	97	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

16	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
184	186	14	10	85	156	158	42	38	112	128	130	70	66	1379
13	11	183	187	111	41	39	155	159	86	69	67	127	131	1379
26	171	193	4	87	149	48	165	32	110	82	115	137	60	1379
25	172	8	189	109	53	144	36	161	88	81	116	64	133	1379
22	175	1	196	94	50	147	160	37	103	78	119	57	140	1379
174	23	188	9	107	54	143	29	168	90	118	79	132	65	1379
169	28	190	7	106	141	56	162	35	91	113	84	134	63	1379
177	20	12	185	92	146	51	40	157	105	123	74	62	135	1379
17	180	15	182	104	45	152	43	154	93	73	124	71	126	1379
170	27	192	5	89	142	55	164	33	108	114	83	136	61	1379
24	173	181	16	95	52	145	153	44	102	80	117	138	59	1379
179	18	2	195	101	151	46	30	167	96	121	76	58	139	1379
21	176	194	3	100	49	148	166	31	97	77	120	68	129	1379
178	19	6	191	99	150	47	34	163	98	122	75	125	72	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

23	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
63	123	136	132	67	70	15	182	8	9	181	183	19	191	1379
135	82	111	81	120	62	195	2	189	188	16	14	178	6	1379
64	78	107	90	119	133	4	193	150	43	156	45	166	31	1379
59	75	89	108	122	138	17	180	158	146	51	39	35	162	1379
68	117	103	94	80	129	30	167	44	49	148	153	3	194	1379
137	113	92	105	84	60	176	21	157	56	141	40	27	170	1379
128	114	99	98	83	69	192	5	155	142	55	42	18	179	1379
72	87	101	96	110	125	165	32	46	52	145	151	185	12	1379
131	112	106	91	85	66	29	168	48	53	144	149	190	7	1379
57	121	93	104	76	140	187	10	37	147	50	160	161	36	1379
139	118	100	97	79	58	1	196	38	143	54	159	174	23	1379
73	88	95	102	109	124	171	26	152	154	41	47	13	184	1379
126	77	86	116	115	71	34	22	177	169	25	164	186	11	1379
127	74	61	65	130	134	163	175	20	28	172	33	24	173	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

42	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
7	192	1	194	15	184	9	186	28	174	21	170	25	173	1379
2	193	8	191	10	185	16	183	171	164	166	29	35	26	1379
196	3	190	5	188	11	182	13	18	34	159	38	163	179	1379
189	6	195	4	181	14	187	12	175	36	158	39	161	22	1379
47	42	55	152	151	48	147	146	17	165	37	160	32	180	1379
44	66	63	135	65	129	133	153	178	30	40	157	167	19	1379
145	139	127	74	121	72	58	52	177	162	31	168	33	20	1379
141	130	75	118	79	122	67	56	24	23	176	27	172	169	1379
54	57	124	119	78	73	140	143	112	116	83	110	84	86	1379
49	136	69	77	120	128	61	148	108	97	102	91	104	89	1379
154	137	71	80	117	126	60	43	88	92	103	98	101	109	1379
156	59	125	123	76	70	138	41	90	106	93	100	95	107	1379
144	64	134	62	132	68	131	53	82	99	96	105	94	115	1379
51	155	142	45	46	149	50	150	111	81	114	87	113	85	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

63	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
7	192	1	194	15	184	9	186	24	173	26	33	168	167	1379
2	193	8	191	10	185	16	183	166	31	171	164	29	30	1379
196	3	190	5	188	11	182	13	28	169	159	38	19	178	1379
189	6	195	4	181	14	187	12	163	34	40	157	180	17	1379
62	135	129	64	48	49	150	151	35	162	158	39	20	177	1379
41	156	68	133	149	148	47	46	175	22	37	160	179	18	1379
154	43	124	126	69	75	138	59	161	176	25	32	170	27	1379
130	67	74	118	79	123	137	60	36	21	172	165	23	174	1379
61	136	125	119	78	72	63	134	102	95	113	82	116	83	1379
44	153	76	80	117	121	143	54	94	103	84	115	81	114	1379
155	42	70	77	120	127	145	52	97	100	85	112	107	90	1379
141	56	122	71	128	73	50	147	98	99	110	87	92	105	1379
58	45	132	146	66	144	55	142	96	101	111	86	106	91	1379
139	152	65	51	131	53	57	140	104	93	88	109	89	108	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.2 Part 2. Magic Squares of Order 6 in the Middle

This part give some magic square of order 14 written in different ways. All these magic squares magic square of order 6 is in the middle. There are different choices of magic squares of order 6. See below few examples:

66	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
7	185	188	2	8	193	10	6	194	192	25	176	166	27	1379
196	183	182	16	179	20	13	17	178	1	32	159	38	165	1379
186	14	15	181	18	177	184	180	19	11	29	37	160	168	1379
5	12	9	195	189	4	187	191	3	190	175	36	161	22	1379
67	136	126	65	112	110	83	116	84	86	169	163	34	28	1379
125	119	78	72	82	97	102	91	104	115	24	33	164	173	1379
128	80	117	69	88	92	103	98	101	109	167	162	35	30	1379
66	77	120	131	90	106	93	100	95	107	171	40	157	26	1379
68	118	79	129	108	99	96	105	94	89	23	158	39	174	1379
133	73	124	64	111	87	114	81	113	85	170	21	31	172	1379
62	122	75	135	150	52	49	151	149	44	147	155	43	45	1379
70	76	121	127	41	57	60	56	143	53	138	139	142	156	1379
134	123	74	63	51	140	137	141	54	144	59	58	55	146	1379
132	61	71	130	152	145	148	46	48	153	50	42	154	47	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

73	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
180	13	16	183	182	18	19	177	5	192	166	31	40	157	1379
17	184	181	14	15	179	178	20	190	7	165	32	158	39	1379
11	191	8	1	10	188	185	194	4	193	176	21	161	36	1379
186	6	189	196	187	9	12	3	195	2	24	173	35	162	1379
134	72	126	62	81	115	114	113	82	86	26	171	163	34	1379
63	125	71	135	110	88	108	89	91	105	29	168	160	37	1379
73	124	68	129	104	103	95	96	100	93	27	170	33	164	1379
76	121	132	65	98	94	101	102	97	99	175	22	38	159	1379
120	77	61	136	87	106	90	107	109	92	167	174	28	25	1379
122	75	133	64	111	85	83	84	112	116	30	23	169	172	1379
78	119	70	127	153	44	51	148	152	149	52	147	42	47	1379
123	74	66	131	46	151	146	49	45	48	145	50	155	150	1379
79	118	130	67	154	43	55	54	141	144	138	57	60	139	1379
117	80	128	69	41	156	142	143	56	53	59	140	137	58	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

90	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	120	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	
13	186	188	7	59	140	60	133	136	63	41	158	160	35	1379
6	169	28	191	62	67	129	132	66	135	34	50	147	163	1379
187	22	175	10	139	130	68	65	131	58	159	48	149	38	1379
185	172	25	12	134	57	137	64	61	138	157	144	53	40	1379
189	23	174	8	86	110	83	116	84	112	165	51	146	32	1379
182	26	171	15	115	97	102	91	104	82	154	54	143	43	1379
1	179	18	196	109	92	103	98	101	88	29	151	46	168	1379
3	173	24	194	107	106	93	100	95	90	31	145	52	166	1379
16	20	177	181	89	99	96	105	94	108	44	141	56	153	1379
5	178	19	192	85	87	114	81	113	111	33	45	152	164	1379
193	176	21	4	71	128	72	121	124	75	161	148	49	36	1379
195	17	180	2	74	79	117	120	78	123	167	55	142	30	1379
14	27	170	183	127	118	80	77	119	70	42	150	47	155	1379
190	11	9	184	122	69	125	76	73	126	162	39	37	156	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379
7	192	1	194	41	154	44	155	163	34	15	184	9	186	1379
2	193	8	191	156	43	153	42	38	159	10	185	16	183	1379
196	3	190	5	36	157	35	39	160	164	188	11	182	13	1379
189	6	195	4	161	40	162	158	33	37	181	14	187	12	1379
125	76	69	124	87	113	85	111	114	81	151	46	143	54	1379
72	121	73	128	109	107	89	92	106	88	48	149	53	144	1379
119	78	122	75	82	90	108	105	91	115	145	52	142	55	1379
118	79	127	70	116	84	112	86	83	110	147	50	56	141	1379
77	120	74	123	104	94	98	97	102	96	49	146	47	152	1379
80	117	126	71	93	103	99	100	95	101	51	148	150	45	1379
31	168	25	170	136	63	135	58	59	140	23	176	17	178	1379
26	169	32	167	134	61	62	139	138	57	18	177	24	175	1379
172	27	166	29	64	133	131	65	130	68	180	19	174	21	1379
165	30	171	28	60	137	66	132	67	129	173	22	179	20	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

128	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	138	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	
7	192	1	194	184	14	185	16	10	182	25	176	166	27	1379
2	193	8	191	186	20	17	179	178	11	32	159	38	165	1379
196	3	190	5	9	177	180	18	19	188	29	37	160	168	1379
189	6	195	4	15	183	12	181	187	13	175	36	161	22	1379
67	136	126	65	87	113	85	111	114	81	169	163	34	28	1379
125	119	78	72	109	107	89	92	106	88	24	33	164	173	1379
128	80	117	69	82	90	108	105	91	115	167	162	35	30	1379
66	77	120	131	116	84	112	86	83	110	171	40	157	26	1379
68	118	79	129	104	94	98	97	102	96	23	158	39	174	1379
133	73	124	64	93	103	99	100	95	101	170	21	31	172	1379
62	122	75	135	144	54	145	56	50	142	47	152	41	154	1379
70	76	121	127	146	60	57	139	138	51	42	153	48	151	1379
134	123	74	63	49	137	140	58	59	148	156	43	150	45	1379
132	61	71	130	55	143	52	141	147	53	149	46	155	44	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379
7	192	1	194	17	178	20	179	187	10	21	24	175	174	1379
2	193	8	191	180	19	177	18	14	183	176	173	22	23	1379
196	3	190	5	12	181	11	15	184	188	25	172	33	164	1379
189	6	195	4	185	16	186	182	9	13	30	167	163	34	1379
73	124	126	71	91	106	86	111	83	114	171	26	35	162	1379
123	74	131	66	108	89	109	88	116	81	169	28	161	36	1379
75	122	67	130	90	107	112	85	82	115	168	29	160	37	1379
121	76	129	68	105	92	87	110	113	84	27	170	38	159	1379
120	77	128	69	101	93	100	99	95	103	166	31	158	39	1379
78	119	70	127	96	104	97	98	102	94	32	165	40	157	1379
118	79	72	125	144	55	143	50	51	148	47	152	41	154	1379
80	117	65	132	142	53	54	147	146	49	42	153	48	151	1379
61	64	134	135	56	141	139	57	138	60	156	43	150	45	1379
136	133	63	62	52	145	58	140	59	137	149	46	155	44	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.3 Part 3. $(a + b)^2$ -Type, where a=8 and b=6

This part give some magic square of order 14 based on the algebraic formula $(a + b)^2$. Here a=8 and b=6. Since there are many possibilities of writing magic squares of orders 8 and 6, this give different magic squares of order 14. The complete pdf file is attached. Moreover, the magic rectangle of type $(a + b)$ or $(b + a)$ are also taken in different forms. See below few examples:

142	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
74	68	128	130	117	119	79	73	12	190	5	186	9	189	1379
71	112	110	83	116	84	86	126	193	180	182	13	19	4	1379
72	82	97	102	91	104	115	125	2	18	174	23	179	195	1379
77	88	92	103	98	101	109	120	191	181	21	176	16	6	1379
127	90	106	93	100	95	107	70	1	20	175	22	177	196	1379
122	108	99	96	105	94	89	75	194	14	24	173	183	3	1379
121	111	87	114	81	113	85	76	187	178	15	184	17	10	1379
124	129	69	67	80	78	118	123	8	7	192	11	188	185	1379
36	169	26	163	25	167	170	32	49	147	146	145	50	54	1379
166	156	42	157	44	38	154	31	142	56	140	57	59	137	1379
29	158	48	151	45	150	39	168	136	135	63	64	132	61	1379
162	37	149	46	152	47	160	35	66	62	133	134	65	131	1379
33	43	155	40	153	159	41	164	55	138	58	139	141	60	1379
165	28	171	34	172	30	27	161	143	53	51	52	144	148	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

179	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
69	67	129	127	126	124	74	72	12	190	5	186	9	189	1379
128	130	68	70	71	73	123	125	193	178	15	184	17	4	1379
83	114	97	102	91	104	87	110	2	18	174	23	179	195	1379
86	111	92	103	98	101	90	107	191	181	24	173	16	6	1379
113	84	106	93	100	95	109	88	1	14	175	22	183	196	1379
112	85	99	96	105	94	108	89	194	20	21	176	177	3	1379
119	121	75	77	82	80	116	118	187	180	182	13	19	10	1379
78	76	122	120	115	117	81	79	8	7	192	11	188	185	1379
36	169	26	163	25	167	170	32	54	142	51	148	52	144	1379
166	156	42	157	44	38	154	31	147	65	134	59	136	50	1379
29	158	48	151	45	150	39	168	141	60	135	66	133	56	1379
162	37	149	46	152	47	160	35	139	138	61	132	63	58	1379
33	43	155	40	153	159	41	164	57	131	64	137	62	140	1379
165	28	171	34	172	30	27	161	53	55	146	49	145	143	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

218	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
67	130	77	120	83	114	91	106	12	190	5	186	9	189	1379
69	128	121	76	111	86	105	92	193	180	182	13	19	4	1379
129	68	75	122	88	109	100	97	2	18	175	22	179	195	1379
127	70	82	115	110	87	103	94	191	181	24	173	16	6	1379
126	71	118	79	108	89	98	99	1	14	174	23	183	196	1379
124	73	80	117	90	107	96	101	187	20	21	176	177	10	1379
72	125	116	81	113	84	93	104	194	178	15	184	17	3	1379
74	123	119	78	85	112	102	95	8	7	192	11	188	185	1379
36	169	26	163	25	167	170	32	54	144	52	51	148	142	1379
166	156	42	157	44	38	154	31	53	143	145	146	49	55	1379
29	158	48	150	45	151	39	168	141	56	65	134	59	136	1379
162	37	149	47	152	46	160	35	139	58	60	135	66	133	1379
33	43	155	40	153	159	41	164	147	50	138	61	132	63	1379
165	28	171	34	172	30	27	161	57	140	131	64	137	62	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

297	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
125	74	113	78	116	85	111	86	19	178	183	184	17	10	1379
72	123	84	119	81	112	75	122	182	15	14	13	180	187	1379
76	121	109	90	108	87	82	115	191	6	175	22	3	194	1379
83	114	88	107	89	110	126	71	179	18	174	23	196	1	1379
118	79	69	130	73	129	120	70	8	189	21	176	4	193	1379
117	80	128	67	124	68	77	127	12	185	24	173	195	2	1379
102	98	93	103	100	96	91	105	9	16	177	192	186	11	1379
95	99	104	94	97	101	106	92	188	181	20	5	7	190	1379
32	167	36	158	155	43	33	164	54	142	51	148	52	144	1379
165	30	161	39	42	154	40	157	147	65	134	59	136	50	1379
34	163	48	151	150	45	153	44	141	60	135	66	133	56	1379
41	156	149	46	47	152	168	29	139	138	61	132	63	58	1379
160	37	27	172	28	171	162	31	57	131	64	137	62	140	1379
159	38	170	25	169	26	35	166	53	55	146	49	145	143	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

370	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
88	109	79	118	86	111	78	119	3	194	16	181	24	173	1379
110	87	117	80	112	85	120	77	195	2	13	184	175	22	1379
89	108	116	81	113	84	121	76	190	7	182	15	21	176	1379
107	90	82	115	83	114	75	122	193	4	183	14	174	23	1379
69	67	129	127	126	124	72	74	8	189	17	179	178	20	1379
128	130	68	70	71	73	125	123	1	196	180	18	19	177	1379
103	93	98	102	100	96	91	105	192	5	9	187	186	12	1379
94	104	99	95	97	101	106	92	6	191	188	10	11	185	1379
25	168	30	169	171	27	166	32	49	147	146	145	50	54	1379
172	29	167	28	26	170	31	165	142	56	140	57	59	137	1379
40	159	158	37	41	156	33	164	136	135	63	64	132	61	1379
157	38	39	160	155	42	163	34	66	62	133	134	65	131	1379
45	151	150	48	154	43	162	35	55	138	58	139	141	60	1379
152	46	47	149	44	153	36	161	143	53	51	52	144	148	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

567	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
71	70	128	125	68	129	60	137	1	196	16	181	175	22	1379
126	127	69	72	130	67	138	59	192	5	183	14	24	173	1379
61	134	135	64	131	66	139	58	3	194	13	184	21	176	1379
136	63	62	133	65	132	57	140	190	7	182	15	174	23	1379
51	49	147	145	144	142	54	56	8	189	17	179	178	20	1379
146	148	50	52	53	55	143	141	195	2	180	18	19	177	1379
121	75	80	120	118	78	73	123	6	191	9	187	186	12	1379
76	122	117	77	79	119	124	74	193	4	188	10	11	185	1379
25	171	27	169	168	30	166	32	94	103	84	115	81	114	1379
172	26	170	28	29	167	31	165	102	95	113	82	116	83	1379
37	159	158	40	41	156	33	164	98	99	111	86	92	105	1379
160	38	39	157	155	42	163	34	97	100	110	87	107	90	1379
150	151	45	48	154	43	162	35	104	93	88	109	89	108	1379
47	46	152	149	44	153	36	161	96	101	85	112	106	91	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.4 Part 4. $(a + b)^2$ –Type Closed Form I

This part give magic squares of order 14 based on the algebraic formula $(a + b)^2$. Here it is applied in little different way. We have taken in three different ways a magic rectangle of order 6×14 . Also different forms of magic rectangles of order 6×8 are taken. Different types of magic squares of order 8 are considered to bring magic squares of order 14. See below few examples.

584	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
171	25	32	27	167	169	142	55	12	190	5	186	9	189	1379
161	43	153	159	39	36	56	141	193	180	182	13	19	4	1379
162	155	46	151	42	35	51	146	187	20	174	23	177	10	1379
168	41	149	48	156	29	145	52	2	181	24	173	16	195	1379
34	37	152	45	160	163	144	53	191	18	175	22	179	6	1379
31	157	47	150	40	166	54	143	194	14	21	176	183	3	1379
33	158	44	38	154	164	49	148	1	178	15	184	17	196	1379
28	172	165	170	30	26	147	50	8	7	192	11	188	185	1379
127	139	64	59	126	57	68	72	128	131	73	135	137	63	1379
74	82	78	75	113	88	114	121	112	118	87	117	77	123	1379
61	111	99	95	103	101	93	106	100	92	107	89	86	136	1379
65	81	98	102	94	96	104	91	97	105	90	108	116	132	1379
130	120	119	122	84	109	83	76	85	79	110	80	115	67	1379
134	58	133	138	71	140	129	125	69	66	124	62	60	70	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

620	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
152	149	47	46	27	170	145	52	8	189	184	183	10	17	1379
45	48	150	151	25	172	51	146	182	15	13	14	187	180	1379
37	159	158	40	171	26	56	141	19	178	174	23	3	194	1379
160	38	39	157	169	28	144	53	12	185	24	173	196	1	1379
44	154	155	41	168	29	142	55	179	18	175	22	4	193	1379
153	43	42	156	166	31	54	143	191	6	21	176	195	2	1379
36	162	163	33	30	167	49	148	9	16	177	192	186	11	1379
161	35	34	164	32	165	147	50	188	181	20	5	7	190	1379
127	139	64	59	128	72	68	57	73	131	126	135	137	63	1379
74	82	78	75	87	113	114	121	112	118	88	117	77	123	1379
61	111	89	103	101	95	100	106	107	93	92	99	86	136	1379
65	81	108	94	96	102	97	91	90	104	105	98	116	132	1379
130	120	119	122	110	84	83	76	85	79	109	80	115	67	1379
134	58	133	138	69	125	129	140	124	66	71	62	60	70	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

678	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	668	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	
32	159	170	172	26	37	161	31	192	5	13	184	21	176	1379
29	154	152	41	158	42	44	168	195	2	183	14	175	22	1379
163	40	55	144	49	146	157	34	3	194	182	15	174	23	1379
35	46	50	145	56	143	151	162	193	4	16	181	24	173	1379
169	48	148	51	142	53	149	28	1	196	17	179	178	20	1379
164	150	141	54	147	52	47	33	6	191	180	18	19	177	1379
30	153	45	156	39	155	43	167	190	7	9	187	186	12	1379
166	38	27	25	171	160	36	165	8	189	188	10	11	185	1379
126	61	63	127	67	64	125	129	140	79	82	119	69	128	1379
71	136	134	70	130	133	72	68	57	118	115	78	132	65	1379
122	75	108	93	106	96	97	103	98	90	92	102	80	117	1379
121	76	89	104	91	101	100	94	99	107	105	95	113	84	1379
66	131	137	83	124	123	77	109	86	135	81	58	59	110	1379
85	112	60	114	73	74	120	88	111	62	116	139	138	87	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379
167	30	34	41	160	159	147	50	8	189	183	184	10	17	1379
32	165	163	156	37	38	56	141	182	15	14	13	187	180	1379
155	42	151	46	27	170	51	146	12	185	24	173	3	194	1379
36	161	48	149	172	25	145	52	191	6	21	176	196	1	1379
158	39	150	47	31	166	142	55	179	18	175	22	4	193	1379
43	154	45	152	171	26	54	143	19	178	174	23	195	2	1379
153	33	40	168	162	35	49	148	9	16	177	192	186	11	1379
44	164	157	29	28	169	144	53	188	181	20	5	7	190	1379
126	129	67	127	64	119	125	61	140	79	63	82	69	128	1379
71	68	130	70	133	78	72	136	57	118	134	115	132	65	1379
122	75	103	90	102	96	108	98	97	93	106	92	80	117	1379
121	76	94	107	95	101	89	99	100	104	91	105	113	84	1379
66	131	110	83	124	123	77	109	86	135	81	58	59	137	1379
85	112	87	114	73	74	120	88	111	62	116	139	138	60	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

713	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	727	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	
142	171	25	32	27	167	169	55	8	189	10	184	17	183	1379
56	161	43	153	159	39	36	141	182	15	187	13	180	14	1379
51	162	37	46	151	160	35	146	12	185	175	22	3	194	1379
145	31	41	149	48	156	166	52	179	18	174	23	196	1	1379
144	34	155	152	45	42	163	53	191	6	24	173	4	193	1379
54	168	157	47	150	40	29	143	19	178	21	176	195	2	1379
49	33	158	44	38	154	164	148	9	16	177	192	186	11	1379
147	28	172	165	170	30	26	50	188	181	20	5	7	190	1379
133	64	139	71	69	138	66	140	68	73	137	74	72	135	1379
65	132	58	126	128	59	131	57	129	124	60	123	125	62	1379
127	70	86	111	78	110	77	115	113	75	114	118	109	76	1379
63	134	116	81	119	87	120	82	84	122	83	79	88	121	1379
136	61	80	117	94	96	102	97	92	106	89	104	107	98	1379
67	130	112	85	103	101	95	100	105	91	108	93	90	99	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379
44	152	42	158	41	154	37	160	8	189	10	183	17	184	1379
157	55	144	49	146	40	25	172	182	15	187	14	180	13	1379
151	50	145	56	143	46	162	35	12	185	174	23	3	194	1379
149	148	51	142	53	48	33	164	179	18	175	22	196	1	1379
47	141	54	147	52	150	31	166	191	6	24	173	4	193	1379
43	45	155	39	156	153	161	36	19	178	21	176	195	2	1379
34	32	170	159	30	169	168	26	9	16	177	192	186	11	1379
163	165	27	38	167	28	171	29	188	181	20	5	7	190	1379
133	64	139	71	69	138	66	140	68	73	137	74	72	135	1379
65	132	58	126	128	59	131	57	129	124	60	123	125	62	1379
127	70	112	85	78	110	77	115	113	75	114	118	109	76	1379
63	134	116	81	119	87	120	82	84	122	83	79	88	121	1379
136	61	80	117	94	96	102	97	92	106	89	104	107	98	1379
67	130	86	111	103	101	95	100	105	91	108	93	90	99	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.5 Part 5. $(a + b)^2$ –Type Closed Form II

This part is very much similar to previous part. Here instead of considering magic rectangles of order 6×14 , we have considered two different magic rectangles of order 6×10 and 6×4 covering the space of magic rectangles of order 6×14 . The rest of work is similar to previous part. See below few examples.

759	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
44	37	159	157	156	154	42	39	3	196	4	189	192	7	1379
153	160	38	40	41	43	155	158	6	11	10	185	188	191	1379
53	144	61	136	65	132	57	140	195	186	187	12	9	2	1379
56	141	135	62	131	66	60	137	190	1	193	8	5	194	1379
143	54	134	63	130	67	139	58	78	125	69	118	120	81	1379
142	55	64	133	68	129	138	59	76	108	110	90	86	121	1379
45	52	47	148	149	50	151	146	70	84	100	97	113	127	1379
152	145	150	49	48	147	46	51	124	92	99	98	105	73	1379
24	181	14	182	179	13	175	20	82	88	103	94	109	115	1379
178	168	30	32	169	26	166	19	117	106	101	96	91	80	1379
17	170	163	162	33	36	27	180	74	114	93	104	83	123	1379
174	25	34	35	164	161	172	23	122	85	95	102	112	75	1379
21	31	167	165	28	171	29	176	126	111	87	107	89	71	1379
177	16	183	15	18	184	22	173	116	72	128	79	77	119	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

798	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
155	44	143	48	146	55	141	56	3	189	4	196	192	7	1379
42	153	54	149	51	142	45	152	6	10	188	185	11	191	1379
46	151	139	60	138	57	52	145	195	187	9	12	186	2	1379
53	144	58	137	59	140	156	41	190	8	193	1	5	194	1379
148	49	39	160	43	159	150	40	78	69	125	118	120	81	1379
147	50	158	37	154	38	47	157	74	108	110	90	86	123	1379
132	68	63	133	130	66	61	135	117	84	100	97	113	80	1379
65	129	134	64	67	131	136	62	124	92	99	98	105	73	1379
20	170	31	167	24	179	21	176	82	88	103	94	109	115	1379
177	27	166	30	173	18	28	169	76	106	101	96	91	121	1379
22	175	36	33	163	162	165	32	70	114	93	104	83	127	1379
29	168	161	164	34	35	180	17	122	85	95	102	112	75	1379
172	25	15	184	16	183	174	19	126	111	87	107	89	71	1379
171	26	182	13	181	14	23	178	116	128	72	79	77	119	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

844	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
159	149	150	43	156	46	45	40	3	4	189	196	192	7	1379
37	55	53	49	143	145	146	160	6	11	185	10	188	191	1379
44	141	58	140	137	59	56	153	195	186	12	187	9	2	1379
39	147	139	57	60	138	50	158	190	193	8	1	5	194	1379
155	51	144	148	54	52	142	42	71	126	116	106	84	88	1379
157	48	47	154	41	151	152	38	69	128	81	91	113	109	1379
61	68	63	133	130	66	132	135	127	70	97	100	77	120	1379
136	129	134	64	67	131	65	62	92	105	102	95	82	115	1379
20	179	24	167	31	170	21	176	124	73	98	99	114	83	1379
177	18	173	30	166	27	28	169	107	90	96	101	111	86	1379
172	25	162	33	163	36	165	32	119	78	104	93	76	121	1379
171	26	35	164	34	161	180	17	79	118	94	103	117	80	1379
29	168	15	184	16	183	174	19	125	110	74	85	122	75	1379
22	175	182	13	181	14	23	178	72	87	123	112	89	108	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

870	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
159	149	150	43	156	46	45	40	5	192	9	12	187	186	1379
37	55	53	49	143	145	146	160	191	6	188	185	10	11	1379
44	141	58	140	137	59	56	153	190	7	4	1	194	195	1379
39	147	139	57	60	138	50	158	8	189	193	196	3	2	1379
155	51	144	148	54	52	142	42	71	126	116	106	84	88	1379
157	48	47	154	41	151	152	38	69	128	81	91	113	109	1379
61	68	63	133	130	66	132	135	127	70	97	100	77	120	1379
136	129	134	64	67	131	65	62	92	105	102	95	82	115	1379
20	183	15	13	181	178	180	18	124	73	98	99	114	83	1379
177	14	182	184	16	19	17	179	107	90	96	101	111	86	1379
170	171	25	28	29	168	21	176	119	78	104	93	76	121	1379
27	26	172	169	167	30	175	22	79	118	94	103	117	80	1379
33	36	163	162	166	31	174	23	125	110	74	85	122	75	1379
164	161	34	35	32	165	24	173	72	87	123	112	89	108	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

902	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	932	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																		
	155	44	143	48	146	55	141	56	5	192	186	12	187	9	1379		58	139	49	148	56	141	48	149	99	98	194	3	9	188	1379
	42	153	54	149	51	142	45	152	191	6	11	185	10	188	1379		140	57	147	50	142	55	150	47	100	97	195	2	187	10	1379
	46	151	139	60	138	57	52	145	190	7	1	4	194	195	1379		59	138	146	51	143	54	151	46	95	102	1	196	12	185	1379
	53	144	58	137	59	140	156	41	8	189	196	193	3	2	1379		137	60	52	145	53	144	45	152	101	96	4	193	186	11	1379
	148	49	39	160	43	159	150	40	103	93	95	101	100	99	1379		39	37	159	156	157	154	42	44	93	104	5	191	190	8	1379
	147	50	158	37	154	38	47	157	94	104	102	96	97	98	1379		158	160	38	41	40	43	155	153	103	94	192	6	7	189	1379
	132	68	63	133	130	66	61	135	69	128	77	119	118	80	1379		133	63	68	132	130	66	61	135	122	75	77	119	118	80	1379
	65	129	134	64	67	131	136	62	127	70	120	78	79	117	1379		64	134	129	65	67	131	136	62	71	126	120	78	79	117	1379
	13	183	18	181	180	15	178	20	74	123	85	111	110	88	1379		20	170	179	167	24	31	21	176	76	121	85	111	110	88	1379
	184	14	179	16	17	182	19	177	124	73	112	86	87	109	1379		177	27	18	30	173	166	28	169	69	128	112	86	87	109	1379
	170	28	25	171	29	168	21	176	125	72	114	83	92	105	1379		22	175	162	33	163	36	165	32	125	72	115	82	92	105	1379
	27	169	172	26	167	30	175	22	71	126	81	116	107	90	1379		171	26	35	164	34	161	180	17	74	123	81	116	106	91	1379
	33	163	162	36	166	31	174	23	122	75	84	113	106	91	1379		172	25	15	184	16	183	174	19	124	73	84	113	107	90	1379
	164	34	35	161	32	165	24	173	76	121	115	82	89	108	1379		29	168	182	13	181	14	23	178	127	70	114	83	89	108	1379
	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379		1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	

2.6 Part 6. Double Digits Embedded With Magic Squares of Order 10

This part is based on double digit magic squares. To bring magic squares of order 14, we have embedded it with magic squares of order 10. The idea of double digits magic square is given above in a reference list. See below few examples.

943	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	955	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																		
	1	3	195	193	192	191	7	8	9	187	11	185	13	184	1379		1	3	195	193	192	191	7	8	9	187	11	185	13	184	1379
	196	194	2	4	5	6	190	189	188	10	186	12	15	182	1379		196	194	2	4	5	6	190	189	188	10	186	12	15	182	1379
	37	160	89	108	81	116	69	128	141	56	61	136	183	14	1379		37	160	96	107	91	105	93	103	102	89	100	99	183	14	1379
	159	38	106	91	115	82	127	70	140	57	135	62	181	16	1379		159	38	55	146	140	54	145	56	58	50	137	144	181	16	1379
	39	158	107	90	84	113	71	126	55	142	63	134	180	17	1379		39	158	148	131	68	61	135	65	134	64	130	49	180	17	1379
	157	40	92	105	114	83	124	73	60	137	133	64	179	18	1379		157	40	138	66	129	136	62	132	63	133	67	59	179	18	1379
	156	41	85	111	110	88	125	72	138	59	132	65	19	178	1379		156	41	53	51	57	143	52	141	139	147	60	142	19	178	1379
	155	42	112	86	87	109	74	123	58	139	66	131	20	177	1379		155	42	75	117	120	74	76	125	78	70	126	124	20	177	1379
	43	154	77	119	118	80	122	75	143	54	130	67	21	176	1379		43	154	128	111	88	115	84	81	110	114	85	69	21	176	1379
	44	153	120	78	79	117	76	121	53	144	68	129	175	22	1379		44	153	118	86	109	82	113	116	87	83	112	79	175	22	1379
	45	152	93	103	95	101	100	99	49	147	52	146	23	174	1379		45	152	73	80	77	123	121	72	119	127	71	122	23	174	1379
	47	150	104	94	102	96	97	98	148	50	145	51	173	24	1379		47	150	101	90	106	92	104	94	95	108	97	98	173	24	1379
	151	46	25	171	27	169	168	167	31	32	33	35	163	161	1379		151	46	25	171	27	169	168	167	31	32	33	35	163	161	1379
	149	48	172	26	170	28	29	30	166	165	164	162	34	36	1379		149	48	172	26	170	28	29	30	166	165	164	162	34	36	1379
	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379		1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379		

965	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	970	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																
1	3	195	193	192	191	7	8	9	187	11	185	13	184	1379	1	3	195	193	192	191	7	8	9	187	11	185	19	178	1379
196	194	2	4	5	6	190	189	188	10	186	12	15	182	1379	196	194	2	4	5	6	190	189	188	10	186	12	15	182	1379
37	160	52	146	49	147	96	101	69	127	126	72	183	14	1379	37	160	75	126	69	124	98	99	81	88	115	110	183	14	1379
159	38	145	51	148	50	107	90	128	70	71	125	181	16	1379	159	38	121	77	120	76	97	100	113	107	90	84	181	16	1379
39	158	142	56	143	53	91	106	73	123	122	76	180	17	1379	39	158	127	118	79	70	102	95	85	92	105	112	180	17	1379
157	40	55	141	54	144	99	98	124	74	75	121	179	18	1379	157	40	123	80	117	74	96	101	111	89	108	86	179	18	1379
156	41	61	135	134	64	105	92	81	115	114	84	19	178	1379	156	41	72	119	78	125	104	93	114	106	91	83	13	184	1379
155	42	136	62	63	133	89	108	116	82	83	113	20	177	1379	155	42	73	71	128	122	94	103	87	109	82	116	20	177	1379
43	154	65	131	130	68	102	95	80	118	77	119	21	176	1379	43	154	55	56	54	146	145	58	137	50	140	144	21	176	1379
44	153	132	66	67	129	103	94	117	79	120	78	175	22	1379	44	153	148	130	135	131	68	134	65	61	64	49	175	22	1379
45	152	57	139	138	60	100	97	110	88	111	85	23	174	1379	45	152	138	67	62	66	129	63	132	136	133	59	23	174	1379
47	150	140	58	59	137	93	104	87	109	86	112	173	24	1379	47	150	53	141	143	51	52	139	60	147	57	142	173	24	1379
151	46	25	171	27	169	168	167	31	32	33	35	163	161	1379	151	46	25	171	27	169	168	167	31	32	33	35	163	161	1379
149	48	172	26	170	28	29	30	166	165	164	162	34	36	1379	149	48	172	26	170	28	29	30	166	165	164	162	34	36	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	

984	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	1033	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																
1	3	195	193	192	191	7	8	9	187	11	185	13	184	1379	1	3	195	193	192	191	7	8	9	187	11	185	13	184	1379
196	194	2	4	5	6	190	189	188	10	186	12	15	182	1379	196	194	2	4	5	6	190	189	188	10	186	12	23	174	1379
37	160	86	110	84	116	83	112	69	128	77	120	183	14	1379	37	160	106	91	81	116	96	101	127	70	118	79	183	14	1379
159	38	115	97	102	91	104	82	127	70	118	79	181	16	1379	159	38	89	108	115	82	97	100	69	128	80	117	181	16	1379
39	158	109	92	103	98	101	88	126	71	119	78	180	17	1379	39	158	107	90	114	83	102	95	126	71	119	78	180	17	1379
157	40	107	106	93	100	95	90	72	125	80	117	179	18	1379	157	40	92	105	84	113	94	103	72	125	77	120	179	18	1379
156	41	89	99	96	105	94	108	73	123	122	76	19	178	1379	156	41	85	111	110	88	104	93	73	123	122	76	19	178	1379
155	42	85	87	113	81	114	111	124	74	75	121	20	177	1379	155	42	112	86	87	109	98	99	124	74	75	121	20	177	1379
43	154	57	139	138	60	61	136	55	144	49	146	21	176	1379	43	154	52	145	60	53	55	58	143	140	141	138	21	176	1379
44	153	140	58	59	137	135	62	50	145	56	143	175	22	1379	44	153	147	50	137	144	142	139	54	57	56	59	175	22	1379
45	152	65	131	130	68	134	63	148	51	142	53	23	174	1379	45	152	49	148	66	135	61	133	132	63	68	130	15	182	1379
47	150	132	66	67	129	64	133	141	54	147	52	173	24	1379	47	150	146	51	131	62	136	64	65	134	129	67	173	24	1379
151	46	25	171	27	169	168	167	31	32	33	35	163	161	1379	151	46	25	171	27	163	168	167	31	32	33	35	169	161	1379
149	48	172	26	170	28	29	30	166	165	164	162	34	36	1379	149	48	172	26	170	34	29	30	166	165	164	162	28	36	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	

2.7 Part 7. Cornered Magic Squares

This part brings cornered magic squares of order 14. These are of nested type. It allows us to write magic squares up to order 14 in the beginning. It is done after some adjustment. More details on cornered magic squares are given in a reference list given in the beginning of the work. See below few examples.

1130	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
91	106	86	111	83	114	77	120	132	65	169	28	192	5	1379
108	89	109	88	116	81	117	80	66	131	149	48	183	14	1379
90	107	112	85	82	115	130	67	60	137	159	38	13	184	1379
105	92	87	110	113	84	123	74	134	63	45	152	171	26	1379
101	93	100	99	95	103	72	125	51	146	158	39	178	19	1379
96	104	97	98	102	94	69	128	139	58	150	47	11	186	1379
79	70	68	126	122	78	124	121	61	136	164	33	7	190	1379
118	127	129	71	75	119	76	73	144	53	40	157	23	174	1379
49	64	50	62	145	54	140	138	142	141	42	155	25	172	1379
148	133	147	135	52	143	57	59	56	55	31	166	17	180	1379
46	27	35	168	167	153	163	41	160	36	32	154	189	8	1379
151	170	162	29	30	44	34	156	37	161	43	165	182	15	1379
194	187	16	1	177	195	6	21	24	12	4	175	179	188	1379
3	10	181	196	20	2	191	176	173	185	193	22	9	18	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

1155	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
88	109	79	118	86	111	78	119	132	65	158	39	192	5	1379
110	87	117	80	112	85	120	77	51	146	149	48	189	8	1379
89	108	116	81	113	84	121	76	60	137	164	33	13	184	1379
107	90	82	115	83	114	75	122	134	63	42	155	183	14	1379
69	67	129	127	126	124	72	74	66	131	159	38	178	19	1379
128	130	68	70	71	73	125	123	139	58	150	47	11	186	1379
103	93	98	102	100	96	91	105	61	136	169	28	7	190	1379
94	104	99	95	97	101	106	92	144	53	40	157	23	174	1379
49	64	54	62	138	50	145	140	142	141	45	152	25	172	1379
148	133	143	135	59	147	52	57	56	55	31	166	17	180	1379
46	27	35	168	167	153	163	41	160	36	32	154	171	26	1379
151	170	162	29	30	44	34	156	37	161	43	165	182	15	1379
194	187	16	1	177	195	6	21	24	12	4	175	179	188	1379
3	10	181	196	20	2	191	176	173	185	193	22	9	18	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

1172	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
30	27	169	168	31	165	164	34	35	38	160	161	189	8	1379
167	170	28	29	166	32	33	163	162	159	37	36	178	19	1379
63	134	73	126	67	128	81	118	75	120	153	44	13	184	1379
133	64	68	127	74	125	76	119	82	117	156	41	171	26	1379
132	65	130	69	124	71	122	77	116	79	157	40	192	5	1379
66	131	123	72	129	70	115	80	121	78	42	155	11	186	1379
59	138	89	110	83	112	97	102	91	104	43	154	7	190	1379
137	60	84	111	90	109	92	103	98	101	39	158	23	174	1379
136	61	114	85	108	87	106	93	100	95	152	45	25	172	1379
62	135	107	88	113	86	99	96	105	94	46	151	17	180	1379
141	140	58	55	51	145	144	54	148	149	47	50	183	14	1379
56	57	139	142	146	52	53	143	49	48	150	147	182	15	1379
187	195	16	1	177	194	6	21	24	12	4	175	179	188	1379
10	2	181	196	20	3	191	176	173	185	193	22	9	18	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

1422	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
149	48	53	166	145	30	68	128	65	134	66	130	192	5	1379
168	29	144	31	52	167	133	79	120	73	122	64	171	26	1379
148	49	58	139	38	159	127	74	121	80	119	70	13	184	1379
43	154	140	57	33	164	125	124	75	118	77	72	182	15	1379
34	163	61	136	146	51	71	117	78	123	76	126	178	19	1379
39	158	138	59	45	152	67	69	132	63	131	129	11	186	1379
46	151	60	137	47	150	94	103	84	115	81	114	7	190	1379
160	37	141	56	153	44	102	95	113	82	116	83	23	174	1379
156	41	135	62	35	162	98	99	110	87	92	105	25	172	1379
42	155	55	142	170	27	97	100	85	112	107	90	17	180	1379
147	165	28	54	161	36	104	93	88	109	89	108	189	8	1379
50	32	169	143	157	40	96	101	111	86	106	91	183	14	1379
177	21	12	194	175	195	6	16	24	1	4	187	179	188	1379
20	176	185	3	22	2	191	181	173	196	193	10	9	18	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

1607	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	1684	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																
78	120	121	75	74	124	125	71	55	140	141	58	171	26	1379	159	152	150	167	169	48	46	44	31	29	27	160	192	5	1379
119	77	76	122	123	73	72	126	142	57	56	139	192	5	1379	43	144	69	120	61	68	66	122	139	141	55	154	183	14	1379
93	103	106	92	79	117	116	82	165	31	164	34	13	184	1379	40	53	128	77	136	129	131	75	58	56	142	157	13	184	1379
104	94	91	105	118	80	81	115	32	166	33	163	183	14	1379	34	133	64	102	97	98	96	94	104	130	67	163	182	15	1379
67	129	128	70	109	87	90	108	27	169	168	30	178	19	1379	39	52	145	107	90	84	113	88	109	140	57	158	178	19	1379
130	68	69	127	88	110	107	89	170	28	29	167	11	186	1379	32	78	119	92	105	114	83	111	86	73	124	165	11	186	1379
86	112	113	83	97	99	102	96	35	161	160	38	7	190	1379	155	54	143	89	108	115	82	85	112	49	148	42	7	190	1379
111	85	84	114	100	98	95	101	162	36	37	159	23	174	1379	156	127	70	106	91	81	116	110	87	76	121	41	23	174	1379
39	158	50	147	152	45	51	146	136	61	63	134	25	172	1379	161	147	50	95	100	99	101	103	93	123	74	36	25	172	1379
157	40	149	48	43	154	145	52	137	60	66	131	17	180	1379	162	51	137	65	72	126	135	118	80	63	138	35	17	180	1379
42	155	47	150	153	44	144	53	59	138	133	64	189	8	1379	164	146	60	132	125	71	62	79	117	134	59	33	189	8	1379
156	41	148	49	46	151	54	143	62	135	132	65	182	15	1379	37	45	47	30	28	149	151	153	166	168	170	38	171	26	1379
194	175	16	1	177	195	6	21	24	12	4	187	179	188	1379	194	187	16	1	177	195	6	21	24	12	4	175	179	188	1379
3	22	181	196	20	2	191	176	173	185	193	10	9	18	1379	3	10	181	196	20	2	191	176	173	185	193	22	9	18	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	

2.8 Part 8. $(a + b)^2$ -Type, where $a = 10$ and $b = 4$

This part give some magic square of order 14 based on the algebraic formula $(a + b)^2$. Here $a = 10$ and $b = 4$. It is written in two different way. One call as open form, where we have used magic square of order 4 at the corner. The other two are magic rectangles of order 4×10 . Since we have many magic squares of order 10. Replacing different forms of magic square of order 10, we get magic square of order 14. See below few examples.

1818	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379	1899	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379																
96	107	91	105	93	103	102	89	99	100	35	168	158	33	1379	144	69	120	61	68	66	122	139	141	55	35	168	158	33	1379
128	129	72	134	143	56	51	75	59	138	157	150	47	40	1379	53	128	77	136	129	131	75	58	56	142	166	48	149	31	1379
69	68	125	63	54	141	146	122	65	132	160	45	152	37	1379	133	64	86	110	84	116	83	112	130	67	165	151	46	32	1379
62	135	119	77	116	83	79	117	140	57	38	155	42	159	1379	52	145	115	97	102	91	104	82	49	148	157	44	153	40	1379
142	55	82	86	87	112	109	115	123	74	34	154	43	163	1379	78	119	109	92	103	98	101	88	73	124	36	150	47	161	1379
60	137	113	111	110	85	88	84	131	66	165	48	149	32	1379	54	143	107	106	93	100	95	90	140	57	160	41	156	37	1379
52	145	80	120	81	114	118	78	73	124	166	151	46	31	1379	127	70	89	99	96	105	94	108	76	121	38	155	42	159	1379
127	70	133	136	71	139	53	50	76	130	30	41	156	167	1379	147	50	85	87	113	81	114	111	123	74	30	45	152	167	1379
148	49	64	61	126	58	144	147	121	67	36	44	153	161	1379	51	137	65	72	126	80	118	135	63	138	34	154	43	163	1379
101	90	106	92	104	94	95	108	98	97	164	29	39	162	1379	146	60	132	125	71	117	79	62	134	59	164	29	39	162	1379
184	177	180	186	16	185	18	10	14	15	7	192	1	194	1379	15	177	180	185	16	14	18	10	186	184	7	192	1	194	1379
9	21	174	170	28	171	175	25	24	188	2	193	8	191	1379	188	171	28	24	175	21	170	25	174	9	2	193	8	191	1379
19	176	23	27	169	26	22	172	173	178	196	3	190	5	1379	178	26	169	173	22	176	27	172	23	19	196	3	190	5	1379
182	20	17	11	181	12	179	187	183	13	189	6	195	4	1379	13	20	17	12	181	183	179	187	11	182	189	6	195	4	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	

1876	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
96	97	98	104	94	102	124	69	126	75	162	29	39	164	1379
106	91	84	113	110	87	74	80	117	123	40	150	47	157	1379
92	105	115	82	88	109	76	77	120	121	37	154	43	160	1379
89	108	114	83	85	112	125	119	78	72	167	44	153	30	1379
107	90	81	116	111	86	70	118	79	127	161	48	149	36	1379
101	100	99	93	103	95	122	128	71	73	32	41	156	165	1379
144	58	54	137	56	145	140	50	146	55	159	155	42	38	1379
49	61	68	64	65	131	135	134	130	148	31	45	152	166	1379
59	136	129	133	132	66	62	63	67	138	163	151	46	34	1379
142	139	143	60	141	52	57	147	51	53	33	168	158	35	1379
13	20	17	187	181	183	179	12	11	182	7	192	1	194	1379
188	170	28	25	175	21	171	24	174	9	2	193	8	191	1379
178	27	169	172	22	176	26	173	23	19	196	3	190	5	1379
15	177	180	10	16	14	18	185	186	184	189	6	195	4	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

1997	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
61	130	63	133	135	68	132	66	49	148	40	157	150	47	1379
136	67	134	64	62	129	65	131	147	50	158	39	155	42	1379
55	143	53	58	140	60	138	141	146	51	33	164	43	154	1379
142	54	144	139	57	137	59	56	52	145	163	34	41	156	1379
69	128	118	78	121	75	123	80	73	120	160	37	152	45	1379
72	125	79	119	76	122	74	117	124	77	35	162	46	151	1379
126	71	81	112	86	110	113	83	115	88	161	36	153	44	1379
127	70	116	85	111	87	84	114	82	109	38	159	48	149	1379
96	107	99	103	100	105	102	89	91	93	29	167	166	32	1379
101	90	98	94	97	92	95	108	106	104	168	30	31	165	1379
13	183	181	178	15	18	180	20	9	188	7	192	1	194	1379
184	14	16	19	182	179	17	177	187	10	2	193	8	191	1379
175	21	23	173	172	26	170	28	186	11	196	3	190	5	1379
22	176	174	24	25	171	27	169	12	185	189	6	195	4	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2120	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
139	134	64	132	50	62	66	146	52	140	40	157	43	154	1379
61	74	68	128	130	117	79	119	73	136	160	37	46	151	1379
144	127	112	110	83	116	84	86	70	53	33	164	155	42	1379
59	72	82	97	102	91	104	115	125	138	163	34	152	45	1379
137	77	88	92	103	98	101	109	120	60	161	36	153	44	1379
49	71	90	106	93	100	95	107	126	148	38	159	48	149	1379
141	122	108	99	96	105	94	89	75	56	158	39	150	47	1379
55	121	111	87	114	81	113	85	76	142	35	162	41	156	1379
143	124	129	69	67	80	118	78	123	54	29	167	166	32	1379
57	63	133	65	147	135	131	51	145	58	168	30	31	165	1379
13	183	181	178	15	18	180	20	9	188	7	192	1	194	1379
184	14	16	19	182	179	17	177	187	10	2	193	8	191	1379
175	21	23	173	172	26	170	28	186	11	196	3	190	5	1379
22	176	174	24	25	171	27	169	12	185	189	6	195	4	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2131	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
139	62	134	146	132	64	66	52	50	140	40	157	43	154	1379
61	129	126	76	75	120	119	73	70	136	161	36	46	151	1379
59	67	85	113	83	79	115	116	130	138	33	164	155	42	1379
55	74	111	89	107	110	88	86	123	142	163	34	152	45	1379
49	69	117	108	90	87	109	80	128	148	160	37	153	44	1379
137	125	81	84	114	118	82	112	72	60	38	159	48	149	1379
141	127	71	121	122	77	78	124	68	56	158	39	150	47	1379
143	103	98	102	100	96	105	93	91	54	35	162	41	156	1379
144	94	99	95	97	101	92	104	106	53	29	167	166	32	1379
57	135	63	51	65	133	131	145	147	58	168	30	31	165	1379
13	183	181	178	15	18	180	20	9	188	7	192	1	194	1379
184	14	16	19	182	179	17	177	187	10	2	193	8	191	1379
175	21	23	173	172	26	170	28	186	11	196	3	190	5	1379
22	176	174	24	25	171	27	169	12	185	189	6	195	4	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.9 Part 9. $(a + b)^2$ -Type, where $a = 10$ and $b = 4$ Closed Form

This part give some magic square of order 14 based on the algebraic formula $(a + b)^2$. Here $a = 10$. Instead considering $b = 4$, we have considered directly the magic rectangles of order 4×10 . Two of them are complete magic rectangles of order 4×10 and the third is combination of magic rectangles of orders 4×10 and 4×4 . Since we have many magic squares of order 10. Replacing different forms of magic square of order 10, we get magic square of order 14. See below few examples.

2262	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
85	82	118	111	114	81	105	92	66	131	35	168	158	33	1379
113	89	107	110	88	84	94	103	53	144	157	154	43	40	1379
80	108	90	87	109	117	104	93	136	61	160	44	153	37	1379
116	115	79	86	83	112	91	106	147	50	34	151	46	163	1379
100	97	69	130	70	126	123	73	142	55	166	41	156	31	1379
101	96	129	77	122	119	76	68	143	54	165	155	42	32	1379
95	102	72	120	75	78	121	125	58	139	38	150	47	159	1379
98	99	124	67	127	71	74	128	56	141	30	45	152	167	1379
63	132	60	138	57	146	145	133	49	62	36	48	149	161	1379
134	65	137	59	140	51	52	64	135	148	164	29	39	162	1379
13	6	187	182	189	195	193	3	16	5	14	185	1	190	1379
186	20	176	26	23	172	169	173	17	27	22	178	179	11	1379
188	177	21	171	174	25	28	24	180	170	175	19	18	9	1379
7	191	10	15	8	2	4	194	181	192	183	12	196	184	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2284	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
139	134	64	132	52	62	66	146	50	140	33	168	158	35	1379
61	91	106	86	111	113	84	119	78	136	40	44	153	157	1379
137	108	89	109	88	116	81	67	130	60	167	48	149	30	1379
59	90	107	112	85	82	115	73	124	138	37	154	43	160	1379
141	105	92	87	110	83	114	75	122	56	161	151	46	36	1379
49	99	100	101	93	95	103	120	77	148	32	41	156	165	1379
144	98	97	96	104	102	94	79	118	53	159	155	42	38	1379
55	76	74	128	72	117	127	126	68	142	31	45	152	166	1379
143	121	123	69	125	80	70	129	71	54	163	150	47	34	1379
57	63	133	65	145	135	131	51	147	58	162	29	39	164	1379
13	6	187	182	189	195	193	3	16	5	14	185	1	190	1379
186	20	176	26	23	172	169	173	17	27	22	178	179	11	1379
188	177	21	171	174	25	28	24	180	170	175	19	18	9	1379
7	191	10	15	8	2	4	194	181	192	183	12	196	184	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2330	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
85	111	110	88	81	116	123	74	134	63	33	164	41	156	1379
112	86	87	109	115	82	73	124	64	133	163	34	150	47	1379
80	118	77	119	114	83	122	75	136	61	35	162	43	154	1379
117	79	120	78	84	113	76	121	137	60	160	37	155	42	1379
65	70	67	129	126	128	131	72	62	135	158	39	152	45	1379
132	127	130	68	71	69	66	125	59	138	38	159	46	151	1379
51	145	49	147	144	54	142	56	57	140	161	36	153	44	1379
146	52	148	50	53	143	55	141	139	58	40	157	48	149	1379
93	107	96	99	91	103	102	100	89	105	29	167	166	32	1379
104	90	101	98	106	94	95	97	108	92	168	30	31	165	1379
12	193	195	189	5	184	14	181	11	188	7	3	1	196	1379
185	4	2	8	192	13	183	16	186	9	190	194	15	182	1379
173	22	23	21	26	177	180	178	25	169	18	170	187	10	1379
24	175	174	176	171	20	17	19	172	28	179	27	191	6	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2339	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
63	134	58	139	96	101	121	76	88	109	33	164	41	156	1379
135	62	53	144	107	90	80	117	83	114	163	34	48	149	1379
61	136	138	59	91	106	78	119	86	111	35	162	155	42	1379
133	64	60	137	105	92	73	124	113	84	161	36	153	44	1379
132	65	140	57	99	98	123	74	81	116	160	37	152	45	1379
68	129	141	56	102	95	75	122	110	87	38	159	46	151	1379
130	67	143	54	103	94	118	79	115	82	158	39	150	47	1379
66	131	55	142	89	108	120	77	112	85	40	157	43	154	1379
52	147	146	49	100	97	69	72	126	127	29	167	166	32	1379
145	50	51	148	93	104	128	125	71	70	168	30	31	165	1379
12	193	195	189	5	184	14	181	11	188	7	3	1	196	1379
185	4	2	8	192	13	183	16	186	9	190	194	15	182	1379
173	22	23	21	26	177	180	178	25	169	18	170	187	10	1379
24	175	174	176	171	20	17	19	172	28	179	27	191	6	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2499	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
55	146	140	56	145	54	58	50	137	144	40	157	150	47	1379
148	131	61	65	135	68	134	64	130	49	158	39	155	42	1379
138	66	136	132	62	129	63	133	67	59	33	164	43	154	1379
53	51	57	141	52	143	139	147	60	142	163	34	41	156	1379
75	70	120	74	76	125	78	117	126	124	160	37	152	45	1379
128	111	81	115	84	88	110	114	85	69	35	162	46	151	1379
118	86	116	82	113	109	87	83	112	79	161	36	153	44	1379
73	127	77	123	121	72	119	80	71	122	38	159	48	149	1379
96	107	91	103	100	105	102	93	89	99	29	167	166	32	1379
101	90	106	94	97	92	95	104	108	98	168	30	31	165	1379
13	183	181	178	15	18	180	20	9	188	5	192	1	196	1379
184	14	16	19	182	179	17	177	187	10	191	6	195	2	1379
175	21	23	173	172	26	170	28	186	11	190	7	194	3	1379
22	176	174	24	25	171	27	169	12	185	8	189	4	193	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2605	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
139	62	134	146	132	64	66	52	50	140	40	157	43	154	1379
61	100	98	93	103	102	96	91	105	136	163	34	46	151	1379
59	129	119	120	73	76	126	75	70	138	35	162	155	42	1379
55	67	85	83	79	113	115	116	130	142	161	36	152	45	1379
49	74	111	88	107	110	89	86	123	148	160	37	153	44	1379
137	69	117	109	90	87	108	80	128	60	38	159	48	149	1379
141	125	81	114	118	84	82	112	72	56	158	39	150	47	1379
143	127	78	77	124	121	71	122	68	54	33	164	41	156	1379
144	97	99	104	94	95	101	106	92	53	29	167	166	32	1379
57	135	63	51	65	133	131	145	147	58	168	30	31	165	1379
13	183	181	178	15	18	180	20	9	188	191	6	1	196	1379
184	14	16	19	182	179	17	177	187	10	5	192	195	2	1379
175	21	23	173	172	26	170	28	186	11	190	7	4	193	1379
22	176	174	24	25	171	27	169	12	185	8	189	194	3	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2.10 Part 10. Bordered Magic Squares: Embedded with Magic Squares of Order 12

This part is very much similar to double digits bordered magic squares. Here instead of border of double digits, we have single digit border. The inner part is replaced by magic squares of order 12. See below few examples.

2828	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	88	109	79	118	86	111	78	119	51	146	59	138	178	1379
17	110	87	117	80	112	85	120	77	54	143	62	135	180	1379
15	89	108	116	81	113	84	121	76	145	52	137	60	182	1379
11	107	90	82	115	83	114	75	122	144	53	136	61	186	1379
9	69	67	129	127	126	124	72	74	55	141	140	58	188	1379
1	128	130	68	70	71	73	125	123	142	56	57	139	196	1379
179	103	93	98	102	100	96	91	105	43	153	152	46	18	1379
181	94	104	99	95	97	101	106	92	154	44	45	151	16	1379
185	132	65	31	166	27	169	168	30	157	40	50	147	12	1379
187	133	64	34	163	170	28	29	167	156	41	47	150	10	1379
189	66	131	164	33	35	161	160	38	39	158	148	49	8	1379
190	63	134	165	32	162	36	37	159	42	155	149	48	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2912	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	74	68	130	117	128	79	119	73	140	58	141	55	178	1379
17	71	91	108	90	105	83	114	126	57	139	56	142	180	1379
15	77	106	89	107	92	116	81	120	165	31	164	34	182	1379
11	127	86	109	112	87	82	115	70	32	166	33	163	186	1379
9	72	111	88	85	110	113	84	125	27	170	35	162	188	1379
1	122	101	93	100	99	95	103	75	169	28	161	36	196	1379
179	121	96	104	97	98	102	94	76	168	29	160	37	18	1379
181	124	129	67	80	69	118	78	123	30	167	38	159	16	1379
185	157	40	50	147	43	153	152	46	65	134	59	136	12	1379
187	42	155	148	49	154	44	45	151	60	135	66	133	10	1379
189	39	158	47	150	51	145	144	54	138	61	132	63	8	1379
190	156	41	149	48	146	52	53	143	131	64	137	62	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

2962	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	30	27	169	168	31	165	164	34	35	38	160	161	178	1379
17	167	170	28	29	166	32	33	163	162	159	37	36	180	1379
15	63	134	67	130	77	120	83	114	91	106	39	158	182	1379
11	133	64	69	128	121	76	111	86	105	92	157	40	186	1379
9	132	65	129	68	75	122	88	109	100	97	156	41	188	1379
1	66	131	127	70	82	115	110	87	103	94	42	155	196	1379
179	59	138	126	71	118	79	108	89	98	99	43	154	18	1379
181	137	60	124	73	80	117	90	107	96	101	153	44	16	1379
185	136	61	72	125	116	81	113	84	93	104	152	45	12	1379
187	62	135	74	123	119	78	85	112	102	95	46	151	10	1379
189	141	140	58	55	51	145	144	54	148	149	47	50	8	1379
190	56	57	139	142	146	52	53	143	49	48	150	147	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

3015	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	63	134	58	139	96	101	121	76	88	109	47	150	178	1379
17	135	62	53	144	107	90	80	117	83	114	35	162	180	1379
15	61	136	138	59	91	106	78	119	86	111	44	153	182	1379
11	133	64	60	137	105	92	73	124	115	82	167	30	186	1379
9	132	65	140	57	99	98	123	74	112	85	152	45	188	1379
1	68	129	141	56	102	95	75	122	110	87	166	31	196	1379
179	130	67	143	54	103	94	118	79	113	84	160	37	18	1379
181	66	131	55	142	89	108	120	77	81	116	161	36	16	1379
185	52	147	146	49	100	97	69	72	126	127	149	48	12	1379
187	145	50	51	148	93	104	128	125	71	70	40	157	10	1379
189	27	169	154	163	159	42	156	33	46	39	29	165	8	1379
190	170	28	43	34	38	155	41	164	151	158	32	168	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

3253	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	159	150	152	167	169	48	46	44	31	29	27	160	178	1379
17	43	94	87	109	82	116	103	124	126	69	75	154	180	1379
15	40	97	111	107	90	86	100	125	118	79	72	157	182	1379
11	39	102	85	89	108	112	95	74	77	120	123	158	186	1379
9	34	96	114	92	105	83	101	70	80	117	127	163	188	1379
1	32	104	113	106	91	84	93	76	119	78	121	165	196	1379
179	155	98	81	88	115	110	99	122	71	128	73	42	18	1379
181	156	49	148	60	53	55	58	143	141	140	138	41	16	1379
185	161	147	50	137	144	142	139	54	56	57	59	36	12	1379
187	162	52	145	66	135	130	133	132	63	68	61	35	10	1379
189	164	146	51	131	62	67	64	65	134	129	136	33	8	1379
190	37	47	45	30	28	149	151	153	166	168	170	38	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

3266	14x14	Inder J. Taneja	https://numbers-magic.com/	@IJTANEJA	©IJT	1379								
183	172	174	176	192	194	26	24	22	20	6	4	2	184	1379
19	159	150	152	167	169	48	46	44	31	29	27	160	178	1379
17	43	51	49	147	145	144	54	142	56	57	140	154	180	1379
15	40	146	148	50	52	53	143	55	141	59	138	157	182	1379
11	39	73	124	81	115	114	113	82	86	139	58	158	186	1379
9	34	123	74	110	88	108	89	91	105	137	60	163	188	1379
1	32	75	122	104	103	95	96	100	93	136	61	165	196	1379
179	155	121	76	98	94	101	102	97	99	62	135	42	18	1379
181	156	120	77	87	106	90	107	109	92	134	63	41	16	1379
185	161	118	79	111	85	83	84	112	116	64	133	36	12	1379
187	162	80	117	65	131	67	129	72	70	126	128	35	10	1379
189	164	78	119	132	66	130	68	125	127	71	69	33	8	1379
190	37	47	45	30	28	149	151	153	166	168	170	38	7	1379
13	25	23	21	5	3	171	173	175	177	191	193	195	14	1379
1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379

3 Author's Contribution to Magic Squares and Recreation Numbers

For author's contribution to **magic squares** and **recreation numbers** please see the links below:

- Inder J. Taneja, Magic Squares, <https://inderjtaneja.com/2019/06/27/publications-magic-squares/>
- Inder J. Taneja, Recreation of Numbers, <https://inderjtaneja.com/2019/06/27/publications-recreation-of-numbers/>

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- [3] Inder J. Taneja, Different Types of Magic Squares of Orders 6, 8 and 10, <https://numbers-magic.com/?p=2576>
- [4] Inder J. Taneja, Different Types of Magic Squares of Order 12, <https://numbers-magic.com/?p=2598>

• Block-Wise Magic Squares

- [5] Inder J. Taneja, Block-Wise Constructions of Magic and Bimagic Squares of Orders 8 to 108, May 15, 2019, pp. 1-43, **Zenodo**, <http://doi.org/10.5281/zenodo.2843326>.
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