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Representations of Letters and Numbers With Equal Sums Magic Squares of Order 6

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Abstract

This work brings 26 letters from A to Z and 10 numbers from 0 to 9 in terms of blocks of magic squares of order 6. Letters and numbers are constructed with blocks of equal sums magic square of order 6.

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1 Introduction

In the previous work [22], the author worked with letters from A to Z and numbers from 0 to 9 in terms of equal sums pan magic squares of order 4. In this work, we shall bring same letters and numbers in terms of equal sums magic squares of order 6. In order to bring these results, we shall frequently use the following magic square of order 6.

Example 1.1. *Let's consider a magic square of order 6.*

						111
1	35	34	33	2	6	111
30	8	28	9	11	25	111
24	23	15	16	20	13	111
18	14	21	22	17	19	111
7	26	10	27	29	12	111
31	5	3	4	32	36	111
111	111	111	111	111	111	111

The above magic square of order 6 is due to M. Nakamura [1]. Our aim in this paper is to construct **letters** and **numbers** based on magic squares of order 6. This we have done by considering 6×6 blocks of equal magic sums with consecutive numbers for each letter and each number. The block-wise construction of magic squares with respective distributions using consecutive numbers is given in Appendix 4. Similar work on blocks of magic square of order 4 with equal magic sums can be seen in author's another work [22].

2 Letters in Terms of Magic Squares of Order 6

2.1 Letters A and B

Example 2.1. Below are letters "A" and "B" written in terms of magic squares of order 6:

5	345	336	325	16	56
296	76	276	85	105	245
236	225	145	156	196	125
176	136	205	216	165	185
65	256	96	265	285	116
305	45	25	36	316	356
4	344	337	324	17	57
297	77	277	84	104	244
237	224	144	157	197	124
177	137	204	217	164	184
64	257	97	264	284	117
304	44	24	37	317	357
6	346	335	326	15	55
295	75	275	86	106	246
235	226	146	155	195	126
175	135	206	215	166	186
66	255	95	266	286	115
306	46	26	35	315	355
3	343	338	323	18	58
298	78	278	83	103	243
238	223	143	158	198	123
178	138	203	218	163	183
63	258	98	263	283	118
303	43	23	38	318	358
7	347	334	327	14	54
294	74	274	87	107	247
234	227	147	154	194	127
174	134	207	214	167	187
67	254	94	267	287	114
307	47	27	34	314	354
2	342	339	322	19	59
299	79	279	82	102	242
239	222	142	159	199	122
179	139	202	219	162	182
62	259	99	262	282	112
302	42	22	39	319	352
10	350	331	330	11	51
293	73	273	88	108	248
233	228	148	153	193	128
173	133	208	213	168	188
68	253	93	268	288	113
308	48	28	33	313	353
8	348	333	328	13	53
292	72	272	89	109	249
232	229	149	152	192	129
172	132	209	212	169	189
69	252	92	269	289	112
309	49	29	32	312	352
1	341	340	321	20	60
300	80	280	81	101	241
240	221	141	160	200	121
180	140	201	220	161	181
61	260	100	261	281	120
301	41	21	40	320	360
9	349	332	329	12	52
292	72	272	89	109	249
232	229	149	152	192	129
172	132	209	212	169	189
69	252	92	269	289	112
309	49	29	32	312	352

5	413	404	389	20	68	6	414	403	390	19	67
356	92	332	101	125	293	355	91	331	102	126	294
284	269	173	188	236	149	283	270	174	187	235	150
212	164	245	260	197	221	211	163	246	259	198	222
77	308	116	317	341	140	78	307	115	318	342	139
365	53	29	44	380	428	366	54	30	43	379	427
4	412	405	388	21	69	7	415	402	391	18	66
357	93	333	100	124	292	354	90	330	103	127	295
285	268	172	189	237	148	282	271	175	186	234	151
213	165	244	261	196	220	210	162	247	258	199	223
76	309	117	316	340	141	79	306	114	319	343	138
364	52	28	45	381	429	367	55	31	42	378	426
3	411	406	387	22	70	8	416	401	392	17	65
358	94	334	99	123	291	353	89	329	104	128	296
286	267	171	190	238	147	281	272	176	185	233	152
214	166	243	262	195	219	209	161	248	257	200	224
75	310	118	315	339	142	80	305	113	320	344	137
363	51	27	46	382	430	368	56	32	41	377	425
2	410	407	386	23	71	10	418	399	394	15	63
359	95	335	98	122	290	351	87	327	106	130	298
287	266	170	191	239	146	279	274	178	183	231	154
215	167	242	263	194	218	207	159	250	255	202	226
74	311	119	314	338	143	82	303	111	322	346	135
362	50	26	47	383	431	370	58	34	39	375	423
1	409	408	385	24	72	12	420	397	396	13	61
360	96	336	97	121	289	349	85	325	108	132	300
288	265	169	192	240	145	277	276	180	181	229	156
216	168	241	264	193	217	205	157	252	253	204	228
73	312	120	313	337	144	84	301	109	324	348	133
361	49	25	48	384	432	372	60	36	37	373	421
11	419	398	395	14	62	371	59	35	38	374	422

- The first letter "A" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.
- The second letter "B" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.

2.2 Letters C and D

Example 2.2. Below are letters "C" and "D" written in terms of magic squares of order 6:

8	382	367	360	15	59	9	383	366	361	14	58	10	384	365	362	13	57
323	81	301	96	118	272	322	80	300	97	119	273	321	79	299	98	120	274
257	250	162	169	213	140	256	251	163	168	212	141	255	252	164	167	211	142
191	147	228	235	184	206	190	146	229	234	185	207	189	145	230	233	186	208
74	279	103	294	316	125	75	278	102	295	317	124	76	277	101	296	318	123
338	52	30	37	345	389	339	53	31	36	344	388	340	54	32	35	343	387
7	381	368	359	16	60					11	385	364	363	12	56		
324	82	302	95	117	271					320	78	298	99	121	275		
258	249	161	170	214	139					254	253	165	166	210	143		
192	148	227	236	183	205					188	144	231	232	187	209		
73	280	104	293	315	126					77	276	100	297	319	122		
337	51	29	38	346	390					341	55	33	34	342	386		
6	380	369	358	17	61												
325	83	303	94	116	270												
259	248	160	171	215	138												
193	149	226	237	182	204												
72	281	105	292	314	127												
336	50	28	39	347	391												
5	379	370	357	18	62					1	375	374	353	22	66		
326	84	304	93	115	269					330	88	308	89	111	265		
260	247	159	172	216	137					264	243	155	176	220	133		
194	150	225	238	181	203					198	154	221	242	177	199		
71	282	106	291	313	128					67	286	110	287	309	132		
335	49	27	40	348	392					331	45	23	44	352	396		
4	378	371	356	19	63	3	377	372	355	20	64	2	376	373	354	21	65
327	85	305	92	114	268	328	86	306	91	113	267	329	87	307	90	112	266
261	246	158	173	217	136	262	245	157	174	218	135	263	244	156	175	219	134
195	151	224	239	180	202	196	152	223	240	179	201	197	153	222	241	178	200
70	283	107	290	312	129	69	284	108	289	311	130	68	285	109	288	310	131
334	48	26	41	349	393	333	47	25	42	350	394	332	46	24	43	351	395

5	345	336	325	16	56	6	346	335	326	15	55						
296	76	276	85	105	245	295	75	275	86	106	246						
236	225	145	156	196	125	235	226	146	155	195	126						
176	136	205	216	165	185	175	135	206	215	166	186						
65	256	96	265	285	116	66	255	95	266	286	115						
305	45	25	36	316	356	306	46	26	35	315	355						
4	344	337	324	17	57					7	347	334	327	14	54		
297	77	277	84	104	244					294	74	274	87	107	247		
237	224	144	157	197	124					234	227	147	154	194	127		
177	137	204	217	164	184					174	134	207	214	167	187		
64	257	97	264	284	117					67	254	94	267	287	114		
304	44	24	37	317	357					307	47	27	34	314	354		
3	343	338	323	18	58					8	348	333	328	13	53		
298	78	278	83	103	243					293	73	273	88	108	248		
238	223	143	158	198	123					233	228	148	153	193	128		
178	138	203	218	163	183					173	133	208	213	168	188		
63	258	98	263	283	118					68	253	93	268	288	113		
303	43	23	38	318	358					308	48	28	33	313	353		
2	342	339	322	19	59					9	349	332	329	12	52		
299	79	279	82	102	242					292	72	272	89	109	249		
239	222	142	159	199	122					232	229	149	152	192	129		
179	139	202	219	162	182					172	132	209	212	169	189		
62	259	99	262	282	119					69	252	92	269	289	112		
302	42	22	39	319	359					309	49	29	32	312	352		
1	341	340	321	20	60	10	350	331	330	11	51						
300	80	280	81	101	241	291	71	271	90	110	250						
240	221	141	160	200	121	231	230	150	151	191	130						
180	140	201	220	161	181	171	131	210	211	170	190						
61	260	100	261	281	120	70	251	91	270	290	111						
301	41	21	40	320	360	310	50	30	31	311	351						

- The first letter "C" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.
- The second letter "D" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.

2.3 Letters E and F

Example 2.3. Below are letters "E" and "F" written in terms of magic squares of order 6:

8	348	333	328	13	53	9	349	332	329	12	52	10	350	331	330	11	51
293	73	273	88	108	248	292	72	272	89	109	249	291	71	271	90	110	250
233	228	148	153	193	128	232	229	149	152	192	129	231	230	150	151	191	130
173	133	208	213	168	188	172	132	209	212	169	189	171	131	210	211	170	190
68	253	93	268	288	113	69	252	92	269	289	112	70	251	91	270	290	111
308	48	28	33	313	353	309	49	29	32	312	352	310	50	30	31	311	351
7	347	334	327	14	54												
294	74	274	87	107	247												
234	227	147	154	194	127												
174	134	207	214	167	187												
67	254	94	267	287	114												
307	47	27	34	314	354												
5	345	336	325	16	56	6	346	335	326	15	55						
296	76	276	85	105	245	295	75	275	86	106	246						
236	225	145	156	196	125	235	226	146	155	195	126						
176	136	205	216	165	185	175	135	206	215	166	186						
65	256	96	265	285	116	66	255	95	266	286	115						
305	45	25	36	316	356	306	46	26	35	315	355						
4	344	337	324	17	57												
297	77	277	84	104	244												
237	224	144	157	197	124												
177	137	204	217	164	184												
64	257	97	264	284	117												
304	44	24	37	317	357												
3	343	338	323	18	58	2	342	339	322	19	59	1	341	340	321	20	60
298	78	278	83	103	243	299	79	279	82	102	242	300	80	280	81	101	241
238	223	143	158	198	123	239	222	142	159	199	122	240	221	141	160	200	121
178	138	203	218	163	183	179	139	202	219	162	182	180	140	201	220	161	181
63	258	98	263	283	118	62	259	99	262	282	119	61	260	100	261	281	120
303	43	23	38	318	358	302	42	22	39	319	359	301	41	21	40	320	360

6	278	267	262	11	43	7	279	266	263	10	42	8	280	265	264	9	41
235	59	219	70	86	198	234	58	218	71	87	199	233	57	217	72	88	200
187	182	118	123	155	102	186	183	119	122	154	103	185	184	120	121	153	104
139	107	166	171	134	150	138	106	167	170	135	151	137	105	168	169	136	152
54	203	75	214	230	91	55	202	74	215	231	90	56	201	73	216	232	89
246	38	22	27	251	283	247	39	23	26	250	282	248	40	24	25	249	281
5	277	268	261	12	44												
236	60	220	69	85	197												
188	181	117	124	156	101												
140	108	165	172	133	149												
53	204	76	213	229	92												
245	37	21	28	252	284												
3	275	270	259	14	46	4	276	269	260	13	45						
238	62	222	67	83	195	237	61	221	68	84	196						
190	179	115	126	158	99	189	180	116	125	157	100						
142	110	163	174	131	147	141	109	164	173	132	148						
51	206	78	211	227	94	52	205	77	212	228	93						
243	35	19	30	254	286	244	36	20	29	253	285						
2	274	271	258	15	47												
239	63	223	66	82	194												
191	178	114	127	159	98												
143	111	162	175	130	146												
50	207	79	210	226	95												
242	34	18	31	255	287												
1	273	272	257	16	48												
240	64	224	65	81	193												
192	177	113	128	160	97												
144	112	161	176	129	145												
49	208	80	209	225	96												
241	33	17	32	256	288												

- The letter "E" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.
- The letter "F" is composed of 8 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 288 as given in Example 4.4. The magic sums of each block is $S_{6 \times 6} := 867$.

2.4 Letters G and H

Example 2.4. Below are letters "G" and "H" written in two different ways in terms of magic squares of order 6:

8	348	333	328	13	53	9	349	332	329	12	52	10	350	331	330	11	51				
293	73	273	88	108	248	292	72	272	89	109	249	291	71	271	90	110	250				
233	228	148	153	193	128	232	229	149	152	192	129	231	230	150	151	191	130				
173	133	208	213	168	188	172	132	209	212	169	189	171	131	210	211	170	190				
68	253	93	268	288	113	69	252	92	269	289	112	70	251	91	270	290	111				
308	48	28	33	313	353	309	49	29	32	312	352	310	50	30	31	311	351				
7	347	334	327	14	54																
294	74	274	87	107	247																
234	227	147	154	194	127																
174	134	207	214	167	187																
67	254	94	267	287	114																
307	47	27	34	314	354																
6	346	335	326	15	55																
295	75	275	86	106	246																
235	226	146	155	195	126																
175	135	206	215	166	186																
66	255	95	266	286	115																
306	46	26	35	315	355																
5	345	336	325	16	56																
296	76	276	85	105	245																
236	225	145	156	196	125																
176	136	205	216	165	185																
65	256	96	265	285	116																
305	45	25	36	316	356																
4	344	337	324	17	57	3	343	338	323	18	58	2	342	339	322	19	59				
297	77	277	84	104	244	298	78	278	83	103	243	299	79	279	82	102	242				
237	224	144	157	197	124	238	223	143	158	198	123	239	222	142	159	199	122				
177	137	204	217	164	184	178	138	203	218	163	183	179	139	202	219	162	182				
64	257	97	264	284	117	63	258	98	263	283	118	62	259	99	262	282	119				
304	44	24	37	317	357	303	43	23	38	318	358	302	42	22	39	319	359				
						1	341	340	321	20	60										
						300	80	280	81	101	241										
						240	221	141	160	200	121										
						180	140	201	220	161	181										
						61	260	100	261	281	120										
						301	41	21	40	320	360										

5	379	370	357	18	62																
326	84	304	93	115	269																
260	247	159	172	216	137																
194	150	225	238	181	203																
71	282	106	291	313	128																
335	49	27	40	348	392																
4	378	371	356	19	63																
327	85	305	92	114	268																
261	246	158	173	217	136																
195	151	224	239	180	202																
70	283	107	290	312	129																
334	48	26	41	349	393																
3	377	372	355	20	64	6	380	369	358	17	61	9	383	366	361	14	58				
328	86	306	91	113	267	325	83	303	94	116	270	322	80	300	97	119	273				
262	245	157	174	218	135	259	248	160	171	215	138	256	251	163	168	212	141				
196	152	223	240	179	201	193	149	226	237	182	204	190	146	229	234	185	207				
69	284	108	289	311	130	72	281	105	292	314	127	75	278	102	295	317	124				
333	47	25	42	350	394	336	50	28	39	347	391	339	53	31	36	344	388				
2	376	373	354	21	65																
329	87	307	90	112	266																
263	244	156	175	219	134																
197	153	222	241	178	200																
68	285	109	288	310	131																
332	46	24	43	351	395																
1	375	374	353	22	66																
330	88	308	89	111	265																
264	243	155	176	220	133																
198	154	221	242	177	199																
67	286	110	287	309	132																
331	45	23	44	352	396																
						10	384	365	362	13	57										
						321	79	299	98	120	274										
						255	252	164	167	211	142										
						189	145	230	233	186	208										
						76	277	101	296	318	123										
						340	54	32	35	343	387										
						11	385	364	363	12	56										
						320	78	298	99	121	275										
						254	253	165	166	210	143										
						188	144	231	232	187	209										
						77	276	100	297	319	122										
						341	55	33	34	342	386										

- The second letter "G" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.
- The letter "H" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.

2.5 Letters I and J

Example 2.5. Below are letters "I" and "J" written in terms of magic squares of order 6:

6	244	233	230	9	37	7	245	232	231	8	36
205	51	191	62	76	174	204	50	190	63	77	175
163	160	104	107	135	90	162	161	105	106	134	91
121	93	146	149	118	132	120	92	147	148	119	133
48	177	65	188	202	79	49	176	64	189	203	78
216	34	20	23	219	247	217	35	21	22	218	246
5											
206											
164											
122											
47											
215											
4											
207											
165											
123											
46											
214											
3											
208											
166											
124											
45											
213											
1	239	238	225	14	42	2	240	237	226	13	41
210	56	196	57	71	169	209	55	195	58	72	170
168	155	99	112	140	85	167	156	100	111	139	86
126	98	141	154	113	127	125	97	142	153	114	128
43	182	70	183	197	84	44	181	69	184	198	83
211	29	15	28	224	252	212	30	16	27	223	251

8	280	265	264	9	41
233	57	217	72	88	200
185	184	120	121	153	104
137	105	168	169	136	152
56	201	73	216	232	89
248	40	24	25	249	281
7	279	266	263	10	42
234	58	218	71	87	199
186	183	119	122	154	103
138	106	167	170	135	151
55	202	74	215	231	90
247	39	23	26	250	282
6	278	267	262	11	43
235	59	219	70	86	198
187	182	118	123	155	102
139	107	166	171	134	150
54	203	75	214	230	91
246	38	22	27	251	283
5	277	268	261	12	44
236	60	220	69	85	197
188	181	117	124	156	101
140	108	165	172	133	149
53	204	76	213	229	92
245	37	21	28	252	284
3					
275					
270					
259					
14					
46					
4					
276					
269					
260					
13					
45					
239					
191					
143					
50					
242					

1	273	272	257	16	48
240	64	224	65	81	193
192	177	113	128	160	97
144	112	161	176	129	145
49	208	80	209	225	96
241	33	17	32	256	288
2					
274					
271					
258					
15					
47					
3					
275					
270					
259					
14					
46					
4					
276					
269					
260					
13					
45					
239					
191					
143					
50					
242					

- The letter "I" is composed of 7 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 252 as given in Example 4.3. The magic sums of each block is $S_{6 \times 6} := 759$.
- The letter "J" is composed of 8 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 288 as given in Example 4.4. The magic sums of each block is $S_{6 \times 6} := 867$.

2.6 Letters K and L

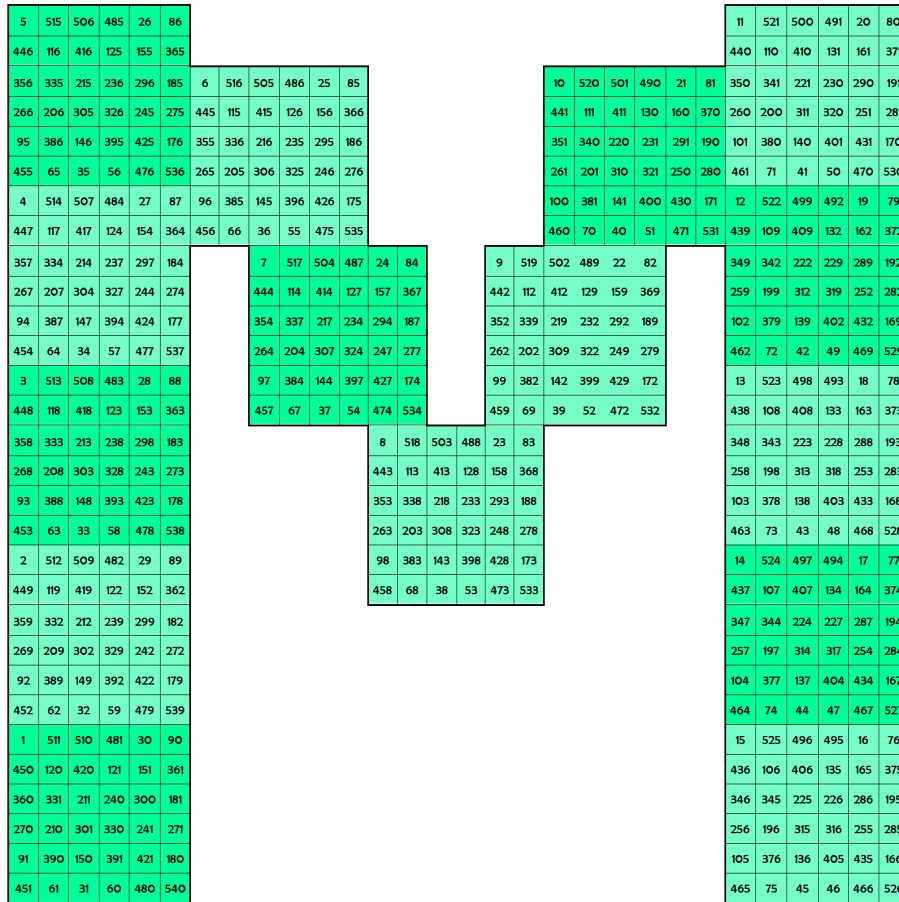
Example 2.6. Below are letters "K" and "L" written in terms of magic squares of order 6:

5	345	336	325	16	56
296	76	276	85	105	245
236	225	145	156	196	125
176	136	205	216	165	185
65	256	96	265	285	116
305	45	25	36	316	356
4	344	337	324	17	57
297	77	277	84	104	244
237	224	144	157	197	124
177	137	204	217	164	184
64	257	97	264	284	117
304	44	24	37	317	357
3	343	338	323	18	58
298	78	278	83	103	243
238	223	143	158	198	123
178	138	203	218	163	183
63	258	98	263	283	118
303	43	23	38	318	358
2	342	339	322	19	59
299	79	279	82	102	242
239	222	142	159	199	122
179	139	202	219	162	182
62	259	99	262	282	119
302	42	22	39	319	359
1	341	340	321	20	60
300	80	280	81	101	241
240	221	141	160	200	121
180	140	201	220	161	181
61	260	100	261	281	120
301	41	21	40	320	360
6	346	335	326	15	55
295	75	275	86	106	246
235	226	146	155	195	126
175	135	206	215	166	186
66	255	95	266	286	115
306	46	26	35	315	355
7	347	334	327	14	54
294	74	274	87	107	247
234	227	147	154	194	127
174	134	207	214	167	187
67	254	94	267	287	114
307	47	27	34	314	354
8	348	333	328	13	53
298	78	278	88	108	248
238	228	148	153	193	128
178	138	208	213	168	188
68	258	98	268	288	113
308	48	28	33	313	353
9	349	332	329	12	52
292	72	272	89	109	249
232	229	149	152	192	129
172	132	209	212	169	189
69	252	92	269	289	112
309	49	29	32	312	352
10	350	331	330	11	51
291	71	271	90	110	250
231	230	150	151	191	130
171	131	210	211	170	190
70	251	91	270	290	111
310	50	30	31	311	351
7	245	232	231	8	36
204	50	190	63	77	175
162	161	105	106	134	91
120	92	147	148	119	133
49	176	64	189	203	78
217	35	21	22	218	246
6	244	233	230	9	37
205	51	191	62	76	174
163	160	104	107	135	90
121	93	146	149	118	132
48	177	65	188	202	79
216	34	20	23	219	247
5	243	234	229	10	38
206	52	192	61	75	173
164	159	103	108	136	89
122	94	145	150	117	131
47	178	66	187	201	80
215	33	19	24	220	248
4	242	235	228	11	39
207	53	193	60	74	172
165	158	102	109	137	88
123	95	144	151	116	130
46	179	67	186	200	81
214	32	18	25	221	249
3	241	236	227	12	40
208	54	194	59	73	171
166	157	101	110	138	87
124	96	143	152	115	129
45	180	68	185	199	82
213	31	17	26	222	250
2	240	237	226	13	41
209	55	195	58	72	170
167	156	100	111	139	86
125	97	142	153	114	128
44	181	69	184	198	83
212	30	16	27	223	251
1	239	238	225	14	42
200	56	196	57	71	169
168	155	99	112	140	85
126	98	141	154	113	127
43	182	70	183	197	84
211	29	15	28	224	252

- The letter "K" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.
- The letter "L" is composed of 7 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 252 as given in Example 4.3. The magic sums of each block is $S_{6 \times 6} := 759$.

2.7 Letter M

Example 2.7. Below is a letter "M" written in terms of magic squares of order 6:



- The letter "M" is composed of 15 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 540 as given in Example 4.11. The magic sums of each block is $S_{6 \times 6} := 1623$.

2.8 Letters N and O

Example 2.8. Below are letters "N" and "O" written in terms of magic squares of order 6:

5	447	438	421	22	74
386	100	360	109	135	317
308	291	187	204	256	161
230	178	265	282	213	239
6	448	437	422	21	73
83	334	126	343	369	152
395	57	31	48	412	464
4	446	439	420	23	75
387	101	361	108	134	316
309	290	186	205	257	160
231	179	264	283	212	238
82	335	127	342	368	153
394	56	30	49	413	465
3	445	440	419	24	76
388	102	362	107	133	315
310	289	185	206	258	159
232	180	263	284	211	237
81	336	128	341	367	154
393	55	29	50	414	466
2	444	441	418	25	77
389	103	363	106	132	314
311	288	184	207	259	158
233	181	262	285	210	236
80	337	129	340	366	155
392	54	28	51	415	467
1	443	442	417	26	78
390	104	364	105	131	313
312	287	183	208	260	157
234	182	261	286	209	235
79	338	130	339	365	156
391	53	27	52	416	468

9	451	434	425	18	70
382	96	356	113	139	321
304	295	191	200	252	165
226	174	269	278	217	243
87	330	122	347	373	148
399	61	35	44	408	460
10	452	433	426	17	69
381	95	355	114	140	322
303	296	192	199	251	166
225	173	270	277	218	244
88	329	121	348	374	147
400	62	36	43	407	459
11	453	432	427	16	68
380	94	354	115	141	323
302	297	193	198	250	167
8	450	435	424	19	71
383	97	357	112	138	320
305	294	190	201	253	164
227	175	268	279	216	242
86	331	123	346	372	149
398	60	34	45	409	461
301	298	194	197	249	168
223	171	272	275	220	246
90	327	119	350	376	145
402	64	38	41	405	457
13	455	430	429	14	66
378	92	352	117	143	325
300	299	195	196	248	169
222	170	273	274	221	247
91	326	118	351	377	144
403	65	39	40	404	456

5	413	404	389	20	68	6	414	403	390	19	67	7	415	402	391	18	66
356	92	332	101	125	293	355	91	331	102	126	294	354	90	330	103	127	295
284	269	173	188	236	149	283	270	174	187	235	150	282	271	175	186	234	151
212	164	245	260	197	221	211	163	246	259	198	222	210	162	247	258	199	223
77	308	116	317	341	140	78	307	115	318	342	139	79	306	114	319	343	138
365	53	29	44	380	428	366	54	30	43	379	427	367	55	31	42	378	426
4	412	405	388	21	69							8	416	401	392	17	65
357	93	333	100	124	292							353	89	329	104	128	296
285	268	172	189	237	148							281	272	176	185	233	152
213	165	244	261	196	220							209	161	248	257	200	224
76	309	117	316	340	141							80	305	113	320	344	137
364	52	28	45	381	429							368	56	32	41	377	425
3	411	406	387	22	70							9	417	400	393	16	64
358	94	334	99	123	291							352	88	328	105	129	297
286	267	171	190	238	147							280	273	177	184	232	153
214	166	243	262	195	219							208	160	249	256	201	225
75	310	118	315	339	142							81	304	112	321	345	136
363	51	27	46	382	430							369	57	33	40	376	424
2	410	407	386	23	71							10	418	399	394	15	63
359	95	335	98	122	290							351	87	327	106	130	298
287	266	170	191	239	146							279	274	178	183	231	154
215	167	242	263	194	218							207	159	250	255	202	226
74	311	119	314	338	143							82	303	111	322	346	135
362	50	26	47	383	431							370	58	34	39	375	423
1	409	408	385	24	72	12	420	397	396	13	61	11	419	398	395	14	62
360	96	336	97	121	289	349	85	325	108	132	300	350	86	326	107	131	299
288	265	169	192	240	145	277	276	180	181	229	156	278	275	179	182	230	155
216	168	241	264	193	217	205	157	252	253	204	228	206	158	251	254	203	227
73	312	120	313	337	144	84	301	109	324	348	133	83	302	110	323	347	134
361	49	25	48	384	432	372	60	36	37	373	421	371	59	35	38	374	422

- The letter "N" is composed of 13 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 468 as given in Example 4.9. The magic sums of each block is $S_{6 \times 6} := 1407$.
- The letter "O" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.

2.9 Letters P and Q

Example 2.9. Below are letters "P" and "Q" written in terms of magic squares of order 6:

5	345	336	325	16	56	6	346	335	326	15	55	7	347	334	327	14	54																	
296	76	276	85	105	245	295	75	275	86	106	246	294	74	274	87	107	247																	
236	225	145	156	196	125	235	226	146	155	195	126	234	227	147	154	194	127																	
176	136	205	216	165	185	175	135	206	215	166	186	174	134	207	214	167	187																	
65	256	96	265	285	116	66	255	95	266	286	115	67	254	94	267	287	114																	
305	45	25	36	316	356	306	46	26	35	315	355	307	47	27	34	314	354																	
4	344	337	324	17	57							8	348	333	328	13	53																	
297	77	277	84	104	244							293	73	273	88	108	248																	
237	224	144	157	197	124							233	228	148	153	193	128																	
177	137	204	217	164	184							173	133	208	213	168	188																	
64	257	97	264	284	117							68	253	93	268	288	113																	
304	44	24	37	317	357							308	48	28	33	313	353																	
3	343	338	323	18	58	10	350	331	330	11	51	9	349	332	329	12	52																	
298	78	278	83	103	243	291	71	271	90	110	250	292	72	272	89	109	249																	
238	223	143	158	198	123	231	230	150	151	191	130	232	229	149	152	192	129																	
178	138	203	218	163	183	171	131	210	211	170	190	172	132	209	212	169	189																	
63	258	98	263	283	118	70	251	91	270	290	111	69	252	92	269	289	112																	
303	43	23	38	318	358	310	50	30	31	311	351	309	49	29	32	312	352																	
2	342	339	322	19	59												12	454	431	428	15	67	13	455	430	429	14	66						
299	79	279	82	102	242												379	93	353	116	142	324	378	92	352	117	143	325						
239	222	142	159	199	122												301	298	194	197	249	168	300	299	195	196	248	169						
179	139	202	219	162	182												223	171	272	275	220	246	222	170	273	274	221	247						
62	259	99	262	282	119												90	327	119	350	376	145	91	326	118	351	377	144						
302	42	22	39	319	359												402	64	38	41	405	457	403	65	39	40	404	456						
1	341	340	321	20	60												3	445	440	419	24	76	2	444	441	418	25	77	1	443	442	417	26	78
300	80	280	81	101	241												388	102	362	107	133	315	389	103	363	106	132	314	390	104	364	105	131	313
240	221	141	160	200	121												310	289	185	206	258	159	311	288	184	207	259	158	312	287	183	208	260	157
180	140	201	220	161	181												232	180	263	284	211	237	233	181	262	285	210	236	234	182	261	286	209	235
61	260	100	261	281	120												81	336	128	341	367	154	80	337	129	340	366	155	79	338	130	339	365	156
301	41	21	40	320	360												393	55	29	50	414	466	392	54	28	51	415	467	391	53	27	52	416	468

7	449	436	423	20	72	8	450	435	424	19	71	9	451	434	425	18	70						
384	98	358	111	137	319	383	97	357	112	138	320	382	96	356	113	139	321						
306	293	189	202	254	163	305	294	190	201	253	164	304	295	191	200	252	165						
228	176	267	280	215	241	227	175	268	279	216	242	226	174	269	278	217	243						
85	332	124	345	371	150	86	331	123	346	372	149	87	330	122	347	373	148						
397	59	33	46	410	462	398	60	34	45	409	461	399	61	35	44	408	460						
6	448	437	422	21	73							10	452	433	426	17	69						
385	99	359	110	136	318							381	95	355	114	140	322						
307	292	188	203	255	162							303	296	192	199	251	166						
229	177	266	281	214	240							225	173	270	277	218	244						
84	333	125	344	370	151							88	329	121	348	374	147						
396	58	32	47	411	463							400	62	36	43	407	459						
5	447	438	421	22	74							11	453	432	427	16	68						
386	100	360	109	135	317							380	94	354	115	141	323						
308	291	187	204	256	161							302	297	193	198	250	167						
230	178	265	282	213	239							224	172	271	276	219	245						
83	334	126	343	369	152							89	328	120	349	375	146						
395	57	31	48	412	464							401	63	37	42	406	458						
4	446	439	420	23	75							12	454	431	428	15	67	13	455	430	429	14	66
387	101	361	108	134	316							379	93	353	116	142	324	378	92	352	117	143	325
309	290	186	205	257	160							301	298	194	197	249	168	300	299	195	196	248	169
231	179	264	283	212	238							223	171	272	275	220	246	222	170	273	274	221	247
82	335	127	342	368	153							90	327	119	350	376	145	91	326	118	351	377	144
394	56	30	49	413	465							402	64	38	41	405	457	403	65	39	40	404	456
3	445	440	419	24	76	2	444	441	418	25	77	1	443	442	417	26	78						
388	102	362	107	133	315	389	103	363	106	132	314	390	104	364	105	131	313						
310	289	185	206	258	159	311	288	184	207	259	158	312	287	183	208	260	157						
232	180	263	284	211	237	233	181	262	285	210	236	234	182	261	286	209	235						
81	336	128	341	367	154	80	337	129	340	366	155	79	338	130	339	365	156						
393	55	29	50	414	466	392	54	28	51	415	467	391	53	27	52	416	468						

- The letter "P" is composed of 10 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 360 as given in Example 4.6. The magic sums of each block is $S_{6 \times 6} := 1083$.
- The letter "Q" is composed of 13 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 468 as given in Example 4.9. The magic sums of each block is $S_{6 \times 6} := 1407$.

2.10 Letters R and S

Example 2.10. Below are letters "R" and "S" written in terms of magic squares of order 6:

5	413	404	389	20	68	6	414	403	390	19	67	7	415	402	391	18	66
356	92	332	101	125	293	355	91	331	102	126	294	354	90	330	103	127	295
284	269	173	188	236	149	283	270	174	187	235	150	282	271	175	186	234	151
212	164	245	260	197	221	211	163	246	259	198	222	210	162	247	258	199	223
77	308	116	317	341	140	78	307	115	318	342	139	79	306	114	319	343	138
365	53	29	44	380	428	366	54	30	43	379	427	367	55	31	42	378	426
4	412	405	388	21	69							8	416	401	392	17	65
357	93	333	100	124	292							353	89	329	104	128	296
285	268	172	189	237	148							281	272	176	185	233	152
213	165	244	261	196	220							209	161	248	257	200	224
76	309	117	316	340	141							80	305	113	320	344	137
364	52	28	45	381	429							368	56	32	41	377	425
3	411	406	387	22	70	10	418	399	394	15	63	9	417	400	393	16	64
358	94	334	99	123	291	351	87	327	106	130	298	352	88	328	105	129	297
286	267	171	190	238	147	279	274	178	183	231	154	280	273	177	184	232	153
214	166	243	262	195	219	207	159	250	255	202	226	208	160	249	256	201	225
75	310	118	315	339	142	82	303	111	322	346	135	81	304	112	321	345	136
363	51	27	46	382	430	370	58	34	39	375	423	369	57	33	40	376	424
2	410	407	386	23	71							11	419	398	395	14	62
359	95	335	98	122	290							350	86	326	107	131	299
287	266	170	191	239	146							278	275	179	182	230	155
215	167	242	263	194	218							206	158	251	254	203	227
74	311	119	314	338	143							83	302	110	323	347	134
362	50	26	47	383	431							371	59	35	38	374	422
1	409	408	385	24	72							12	420	397	396	13	61
360	96	336	97	121	289							349	85	325	108	132	300
288	265	169	192	240	145							277	276	180	181	229	156
216	168	241	264	193	217							205	157	252	253	204	228
73	312	120	313	337	144							84	301	109	324	348	133
361	49	25	48	384	432							372	60	36	37	373	421

9	383	366	361	14	58	10	384	365	362	13	57	11	385	364	363	12	56	
322	80	300	97	119	273	321	79	299	98	120	274	320	78	298	99	121	275	
256	251	163	168	212	141	255	252	164	167	211	142	254	253	165	166	210	143	
190	146	229	234	185	207	189	145	230	233	186	208	188	144	231	232	187	209	
75	278	102	295	317	124	76	277	101	296	318	123	77	276	100	297	319	122	
339	53	31	36	344	388	340	54	32	35	343	387	341	55	33	34	342	386	
8	382	367	360	15	59													
323	81	301	96	118	272													
257	250	162	169	213	140													
191	147	228	235	184	206													
74	279	103	294	316	125													
338	52	30	37	345	389													
7	381	368	359	16	60	6	380	369	358	17	61	5	379	370	357	18	62	
324	82	302	95	117	271	325	83	303	94	116	270	326	84	304	93	115	269	
258	249	161	170	214	139	259	248	160	171	215	138	260	247	159	172	216	137	
192	148	227	236	183	205	193	149	226	237	182	204	194	150	225	238	181	203	
73	280	104	293	315	126	72	281	105	292	314	127	71	282	106	291	313	128	
337	51	29	38	346	390	336	50	28	39	347	391	335	49	27	40	348	392	
													4	378	371	356	19	63
													327	85	305	92	114	268
													261	246	158	173	217	136
													195	151	224	239	180	202
													70	283	107	290	312	129
													334	48	26	41	349	393
1	375	374	353	22	66	2	376	373	354	21	65	3	377	372	355	20	64	
330	88	308	89	111	265	329	87	307	90	112	266	328	86	306	91	113	267	
264	243	155	176	220	133	263	244	156	175	219	134	262	245	157	174	218	135	
198	154	221	242	177	199	197	153	222	241	178	200	196	152	223	240	179	201	
67	286	110	287	309	132	68	285	109	288	310	131	69	284	108	289	311	130	
331	45	23	44	352	396	332	46	24	43	351	395	333	47	25	42	350	394	

- The letter "R" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.
- The letter "S" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.

2.11 Letters T and U

Example 2.11. Below are letters "T" and "U" written in terms of magic squares of order 6 with equal magic sums 515 and 122 using consecutive numbers 1 to 155 and 1 to 188 respectively:

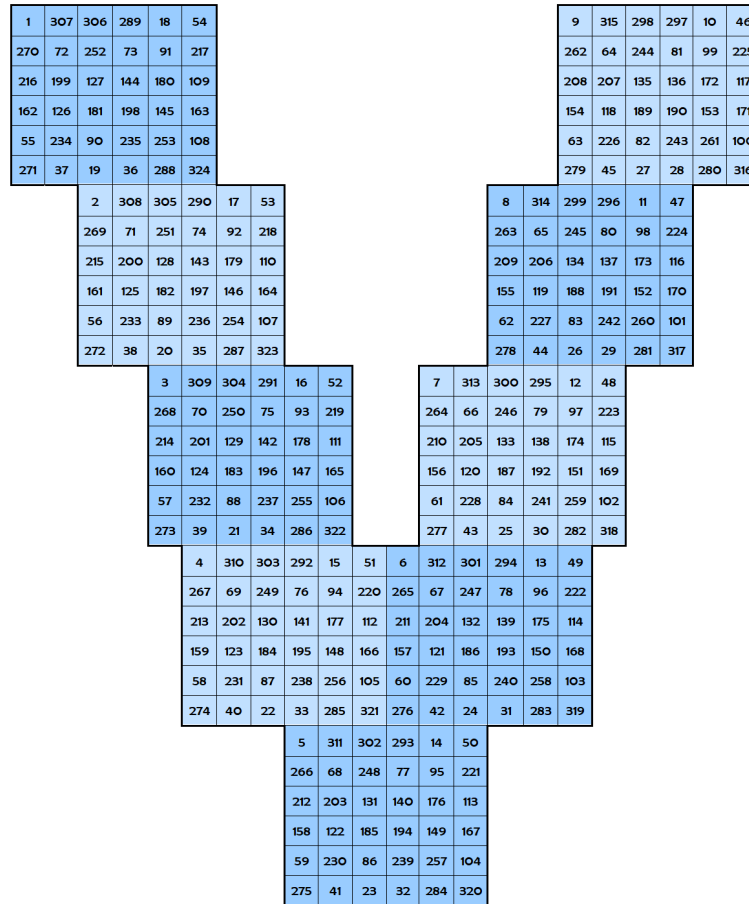
5	243	234	229	10	38	6	244	233	230	9	37	7	245	232	231	8	36
206	52	192	61	75	173	205	51	191	62	76	174	204	50	190	63	77	175
164	159	103	108	136	89	163	160	104	107	135	90	162	161	105	106	134	91
122	94	145	150	117	131	121	93	146	149	118	132	120	92	147	148	119	133
47	178	66	187	201	80	48	177	65	188	202	79	49	176	64	189	203	78
215	33	19	24	220	248	216	34	20	23	219	247	217	35	21	22	218	246
						4	242	235	228	11	39						
						207	53	193	60	74	172						
						165	158	102	109	137	88						
						123	95	144	151	116	130						
						46	179	67	186	200	81						
						214	32	18	25	221	249						
						3	241	236	227	12	40						
						208	54	194	59	73	171						
						166	157	101	110	138	87						
						124	96	143	152	115	129						
						45	180	68	185	199	82						
						213	31	17	26	222	250						
						2	240	237	226	13	41						
						209	55	195	58	72	170						
						167	156	100	111	139	86						
						125	97	142	153	114	128						
						44	181	69	184	198	83						
						212	30	16	27	223	251						
						1	239	238	225	14	42						
						210	56	196	57	71	169						
						168	155	99	112	140	85						
						126	98	141	154	113	127						
						43	182	70	183	197	84						
						211	29	15	28	224	252						

1	375	374	353	22	66												
330	88	308	89	111	265												
264	243	155	176	220	133												
198	154	221	242	177	199												
67	286	110	287	309	132												
331	45	23	44	352	396												
2	376	373	354	21	65												
329	87	307	90	112	266												
263	244	156	175	219	134												
197	153	222	241	178	200												
68	285	109	288	310	131												
332	46	24	43	351	395												
3	377	372	355	20	64												
328	86	306	91	113	267												
262	245	157	174	218	135												
196	152	223	240	179	201												
69	284	108	289	311	130												
333	47	25	42	350	394												
4	378	371	356	19	63												
327	85	305	92	114	268												
261	246	158	173	217	136												
195	151	224	239	180	202												
70	283	107	290	312	129												
334	48	26	41	349	393												
5	379	370	357	18	62	6	380	369	358	17	61	7	381	368	359	16	60
326	84	304	93	115	269	325	83	303	94	116	270	324	82	302	95	117	271
260	247	159	172	216	137	259	248	160	171	215	138	258	249	161	170	214	139
194	150	225	238	181	203	193	149	226	237	182	204	192	148	227	236	183	205
71	282	106	291	313	128	72	281	105	292	314	127	73	280	104	293	315	126
335	49	27	40	348	392	336	50	28	39	347	391	337	51	29	38	346	390

- The letter "T" is composed of 7 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 252 as given in Example 4.3. The magic sums of each block is $S_{6 \times 6} := 759$.
- The letter "U" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 272 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.

2.12 Letter V

Example 2.12. Below is a letter "V" written in terms of magic squares of order 6:



- The letter "V" is composed of 9 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 324 as given in Example 4.3. The magic sums of each block is $S_{6 \times 6} := 975$.

2.13 Letter W

Example 2.13. Below is a letter "W" written in terms of magic squares of order 6:

5	515	506	485	26	86
446	116	416	125	155	365
356	335	215	236	296	185
266	206	305	326	245	275
95	386	146	395	425	176
455	65	35	56	476	536
4	514	507	484	27	87
447	117	417	124	154	364
357	334	214	237	297	184
267	207	304	327	244	274
94	387	147	394	424	177
454	64	34	57	477	537
3	513	508	483	28	88
448	118	418	123	153	363
358	333	213	238	298	183
268	208	303	328	243	273
93	388	148	393	423	178
453	63	33	58	478	538
2	512	509	482	29	89
449	119	419	122	152	362
359	332	212	239	299	182
269	209	302	329	242	272
92	389	149	392	422	179
452	62	32	59	479	539
1	511	510	481	30	90
450	120	420	121	151	361
360	331	211	240	300	181
270	210	301	330	241	271
91	390	150	391	421	180
451	61	31	60	480	540

15	525	496	495	16	76
436	106	406	135	165	375
346	345	225	226	286	195
256	196	315	316	255	285
105	376	136	405	435	166
465	75	45	46	466	526
14	524	497	494	17	77
437	107	407	134	164	374
347	344	224	227	287	194
257	197	314	317	254	284
104	377	137	404	434	167
464	74	44	47	467	527
13	523	498	493	18	78
438	108	408	133	163	373
348	343	223	228	288	193
258	198	313	318	253	283
103	378	138	403	433	168
463	73	43	48	468	528
12	522	499	492	19	79
439	109	409	132	162	372
349	342	222	229	289	192
259	199	312	319	252	282
102	379	139	402	432	169
441	111	411	130	160	370
351	340	220	231	291	190
261	201	310	321	250	280
100	381	141	400	430	171
460	70	40	51	471	531
101	380	140	401	431	170
461	71	41	50	470	530

9	519	502	489	22	82
442	112	412	129	159	369
352	339	219	232	292	189
262	202	309	322	249	279
99	382	142	399	429	172
459	69	39	52	472	532

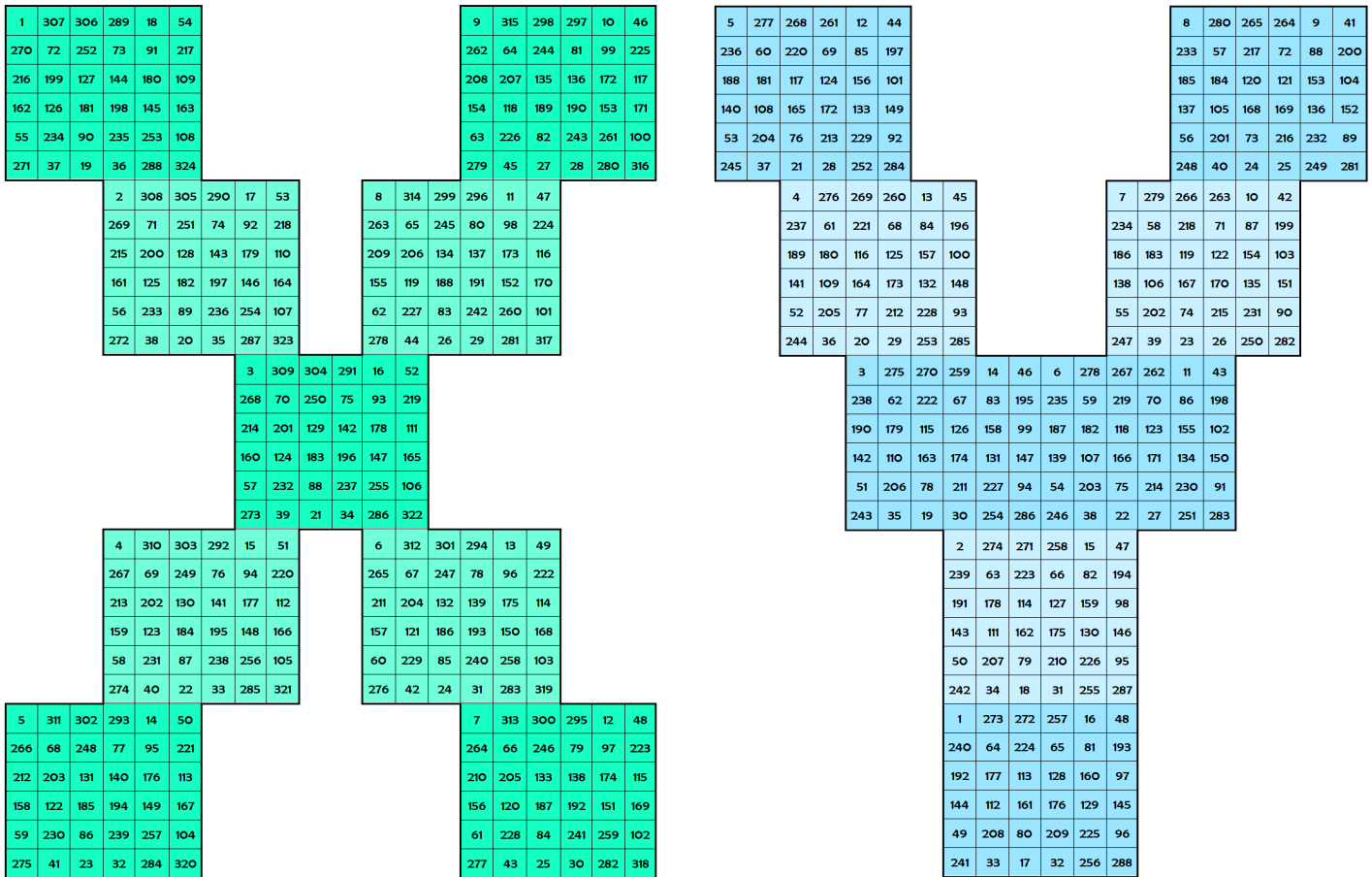
7	517	504	487	24	84
444	114	414	127	157	367
354	337	217	234	294	187
264	204	307	324	247	277
97	384	144	397	427	174
457	67	37	54	474	534

8	518	503	488	23	83
443	113	413	128	158	368
353	338	218	233	293	188
263	203	308	323	248	278
98	383	143	398	428	173
458	68	38	53	473	533

- The letter "W" is composed of 15 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 540 as given in Example 4.11. The magic sums of each block is $S_{6 \times 6} := 1623$.

2.14 Letters X and Y

Example 2.14. Below are letters "X" and "Y" written in terms of magic squares of order 6:



- The letter "X" is composed of 9 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 324 as given in Example 4.5. The magic sums of each block is $S_{6 \times 6} := 975$.
- The letter "Y" is composed of 8 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 284 as given in Example 4.4. The magic sums of each block is $S_{6 \times 6} := 867$.

2.15 Letter Z

Example 2.15. Below is a letter "Z" written in terms of magic squares of order 6:

9	315	298	297	10	46	8	314	299	296	11	47	7	313	300	295	12	48
262	64	244	81	99	225	263	65	245	80	98	224	264	66	246	79	97	223
208	207	135	136	172	117	209	206	134	137	173	116	210	205	133	138	174	115
154	118	189	190	153	171	155	119	188	191	152	170	156	120	187	192	151	169
63	226	82	243	261	100	62	227	83	242	260	101	61	228	84	241	259	102
279	45	27	28	280	316	278	44	26	29	281	317	277	43	25	30	282	318
										6	312	301	294	13	49		
										265	67	247	78	96	222		
										211	204	132	139	175	114		
										157	121	186	193	150	168		
										60	229	85	240	258	103		
										276	42	24	31	283	319		
										5	311	302	293	14	50		
										266	68	248	77	95	221		
										212	203	131	140	176	113		
										158	122	185	194	149	167		
										59	230	86	239	257	104		
										275	41	23	32	284	320		
										4	310	303	292	15	51		
										267	69	249	76	94	220		
										213	202	130	141	177	112		
										159	123	184	195	148	166		
										58	231	87	238	256	105		
										274	40	22	33	285	321		
3	309	304	291	16	52	2	308	305	290	17	53	1	307	306	289	18	54
268	70	250	75	93	219	269	71	251	74	92	218	270	72	252	73	91	217
214	201	129	142	178	111	215	200	128	143	179	110	216	199	127	144	180	109
160	124	183	196	147	165	161	125	182	197	146	164	162	126	181	198	145	163
57	232	88	237	255	106	56	233	89	236	254	107	55	234	90	235	253	108
273	39	21	34	286	322	272	38	20	35	287	323	271	37	19	36	288	324

- The letter "Z" is composed of 9 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 324 as given in Example 4.5. The magic sums of each block is $S_{6 \times 6} := 975$.

3 Numbers

3.1 Numbers 0 and 1

Example 3.1. Below are letters "0" and "1" written in terms of magic squares of order 6:

5	413	404	389	20	68	6	414	403	390	19	67	7	415	402	391	18	66
356	92	332	101	125	293	355	91	331	102	126	294	354	90	330	103	127	295
284	269	173	188	236	149	283	270	174	187	235	150	282	271	175	186	234	151
212	164	245	260	197	221	211	163	246	259	198	222	210	162	247	258	199	223
77	308	116	317	341	140	78	307	115	318	342	139	79	306	114	319	343	138
365	53	29	44	380	428	366	54	30	43	379	427	367	55	31	42	378	426
4	412	405	388	21	69							8	416	401	392	17	65
357	93	333	100	124	292							353	89	329	104	128	296
285	268	172	189	237	148							281	272	176	185	233	152
213	165	244	261	196	220							209	161	248	257	200	224
76	309	117	316	340	141							80	305	113	320	344	137
364	52	28	45	381	429							368	56	32	41	377	425
3	411	406	387	22	70							9	417	400	393	16	64
358	94	334	99	123	291							352	88	328	105	129	297
286	267	171	190	238	147							280	273	177	184	232	153
214	166	243	262	195	219							208	160	249	256	201	225
75	310	118	315	339	142							81	304	112	321	345	136
363	51	27	46	382	430							369	57	33	40	376	424
2	410	407	386	23	71							10	418	399	394	15	63
359	95	335	98	122	290							351	87	327	106	130	298
287	266	170	191	239	146							279	274	178	183	231	154
215	167	242	263	194	218							207	159	250	255	202	226
74	311	119	314	338	143							82	303	111	322	346	135
362	50	26	47	383	431							370	58	34	39	375	423
1	409	408	385	24	72	12	420	397	396	13	61	11	419	398	395	14	62
360	96	336	97	121	289	349	85	325	108	132	300	350	86	326	107	131	299
288	265	169	192	240	145	277	276	180	181	229	156	278	275	179	182	230	155
216	168	241	264	193	217	205	157	252	253	204	228	206	158	251	254	203	227
73	312	120	313	337	144	84	301	109	324	348	133	83	302	110	323	347	134
361	49	25	48	384	432	372	60	36	37	373	421	371	59	35	38	374	422

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

- The letter "0" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.
- The letter "1" is composed of 5 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 180 as given in Example 4.1. The magic sums of each block is $S_{6 \times 6} := 543$.

3.2 Numbers 2 and 3

Example 3.2. Below are letters "2" and "3" written in terms of magic squares of order 6:

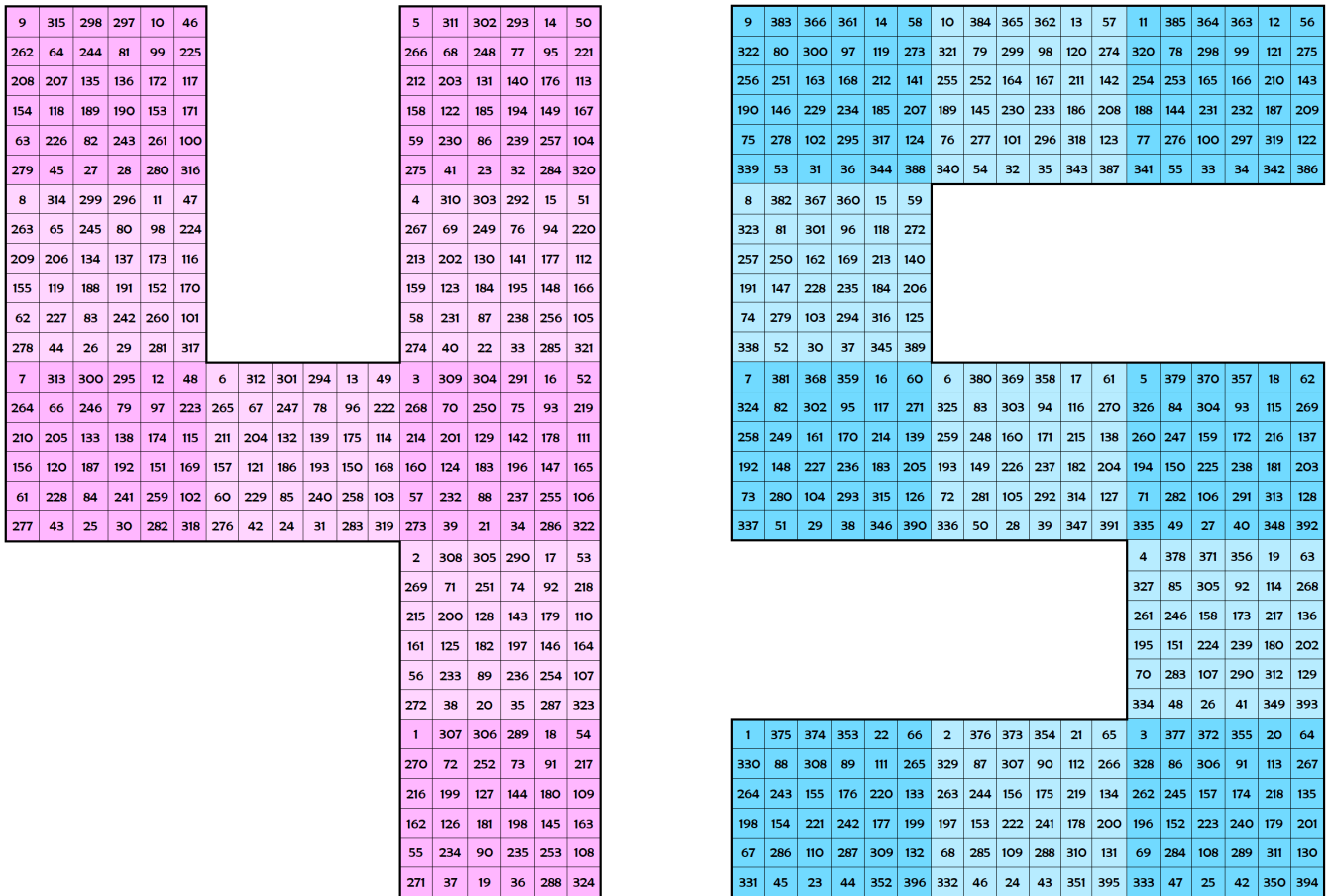
11	385	364	363	12	56	10	384	365	362	13	57	9	383	366	361	14	58
320	78	298	99	121	275	321	79	299	98	120	274	322	80	300	97	119	273
254	253	165	166	210	143	255	252	164	167	211	142	256	251	163	168	212	141
188	144	231	232	187	209	189	145	230	233	186	208	190	146	229	234	185	207
77	276	100	297	319	122	76	277	101	296	318	123	75	278	102	295	317	124
341	55	33	34	342	386	340	54	32	35	343	387	339	53	31	36	344	388
												8	382	367	360	15	59
												323	81	301	96	118	272
												257	250	162	169	213	140
												191	147	228	235	184	206
												74	279	103	294	316	125
												338	52	30	37	345	389
5	379	370	357	18	62	6	380	369	358	17	61	7	381	368	359	16	60
326	84	304	93	115	269	325	83	303	94	116	270	324	82	302	95	117	271
260	247	159	172	216	137	259	248	160	171	215	138	258	249	161	170	214	139
194	150	225	238	181	203	193	149	226	237	182	204	192	148	227	236	183	205
71	282	106	291	313	128	72	281	105	292	314	127	73	280	104	293	315	126
335	49	27	40	348	392	336	50	28	39	347	391	337	51	29	38	346	390
4	378	371	356	19	63												
327	85	305	92	114	268												
261	246	158	173	217	136												
195	151	224	239	180	202												
70	283	107	290	312	129												
334	48	26	41	349	393												
3	377	372	355	20	64	2	376	373	354	21	65	1	375	374	353	22	66
328	86	306	91	113	267	329	87	307	90	112	266	330	88	308	89	111	265
262	245	157	174	218	135	263	244	156	175	219	134	264	243	155	176	220	133
196	152	223	240	179	201	197	153	222	241	178	200	198	154	221	242	177	199
69	284	108	289	311	130	68	285	109	288	310	131	67	286	110	287	309	132
333	47	25	42	350	394	332	46	24	43	351	395	331	45	23	44	352	396

11	385	364	363	12	56	10	384	365	362	13	57	9	383	366	361	14	58
320	78	298	99	121	275	321	79	299	98	120	274	322	80	300	97	119	273
254	253	165	166	210	143	255	252	164	167	211	142	256	251	163	168	212	141
188	144	231	232	187	209	189	145	230	233	186	208	190	146	229	234	185	207
77	276	100	297	319	122	76	277	101	296	318	123	75	278	102	295	317	124
341	55	33	34	342	386	340	54	32	35	343	387	339	53	31	36	344	388
												8	382	367	360	15	59
												323	81	301	96	118	272
												257	250	162	169	213	140
												191	147	228	235	184	206
												74	279	103	294	316	125
												338	52	30	37	345	389
7	381	368	359	16	60	6	380	369	358	17	61	5	379	370	357	18	62
324	82	302	95	117	271	325	83	303	94	116	270	326	84	304	93	115	269
258	249	161	170	214	139	259	248	160	171	215	138	260	247	159	172	216	137
192	148	227	236	183	205	193	149	226	237	182	204	194	150	225	238	181	203
73	280	104	293	315	126	72	281	105	292	314	127	71	282	106	291	313	128
337	51	29	38	346	390	336	50	28	39	347	391	335	49	27	40	348	392
												4	378	371	356	19	63
												327	85	305	92	114	268
												261	246	158	173	217	136
												195	151	224	239	180	202
												70	283	107	290	312	129
												334	48	26	41	349	393
1	375	374	353	22	66	2	376	373	354	21	65	3	377	372	355	20	64
330	88	308	89	111	265	329	87	307	90	112	266	328	86	306	91	113	267
264	243	155	176	220	133	263	244	156	175	219	134	262	245	157	174	218	135
198	154	221	242	177	199	197	153	222	241	178	200	196	152	223	240	179	201
67	286	110	287	309	132	68	285	109	288	310	131	69	284	108	289	311	130
331	45	23	44	352	396	332	46	24	43	351	395	333	47	25	42	350	394

- The letter "2" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.
- The letter "3" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.

3.3 Numbers 4 and 5

Example 3.3. Below are letters "4" and "5" written in terms of magic squares of order 6:



- The letter "4" is composed of 9 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 324 as given in Example 4.5. The magic sums of each block is $S_{6 \times 6} := 975$.
- The letter "5" is composed of 11 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 396 as given in Example 4.7. The magic sums of each block is $S_{6 \times 6} := 1191$.

3.4 Numbers 6 and 7

Example 3.4. Below are letters "6" and "7" written in terms of magic squares of order 6:

10	418	399	394	15	63	11	419	398	395	14	62	12	420	397	396	13	61
351	87	327	106	130	298	350	86	326	107	131	299	349	85	325	108	132	300
279	274	178	183	231	154	278	275	179	182	230	155	277	276	180	181	229	156
207	159	250	255	202	226	206	158	251	254	203	227	205	157	252	253	204	228
82	303	111	322	346	135	83	302	110	323	347	134	84	301	109	324	348	133
370	58	34	39	375	423	371	59	35	38	374	422	372	60	36	37	373	421
9	417	400	393	16	64												
352	88	328	105	129	297												
280	273	177	184	232	153												
208	160	249	256	201	225												
81	304	112	321	345	136												
369	57	33	40	376	424												
8	416	401	392	17	65	1	409	408	385	24	72	2	410	407	386	23	71
353	89	329	104	128	296	360	96	336	97	121	289	359	95	335	98	122	290
281	272	176	185	233	152	288	265	169	192	240	145	287	266	170	191	239	146
209	161	248	257	200	224	216	168	241	264	193	217	215	167	242	263	194	218
80	305	113	320	344	137	73	312	120	313	337	144	74	311	119	314	338	143
368	56	32	41	377	425	361	49	25	48	384	432	362	50	26	47	383	431
7	415	402	391	18	66							3	411	406	387	22	70
354	90	330	103	127	295							358	94	334	99	123	291
282	271	175	186	234	151							286	267	171	190	238	147
210	162	247	258	199	223							214	166	243	262	195	219
79	306	114	319	343	138							75	310	118	315	339	142
367	55	31	42	378	426							363	51	27	46	382	430
6	414	403	390	19	67	5	413	404	389	20	68	4	412	405	388	21	69
355	91	331	102	126	294	356	92	332	101	125	293	357	93	333	100	124	292
283	270	174	187	235	150	284	269	173	188	236	149	285	268	172	189	237	148
211	163	246	259	198	222	212	164	245	260	197	221	213	165	244	261	196	220
78	307	115	318	342	139	77	308	116	317	341	140	76	309	117	316	340	141
366	54	30	43	379	427	365	53	29	44	380	428	364	52	28	45	381	429

7	245	232	231	8	36	6	244	233	230	9	37	5	243	234	229	10	38
204	50	190	63	77	175	205	51	191	62	76	174	206	52	192	61	75	173
162	161	105	106	134	91	163	160	104	107	135	90	164	159	103	108	136	89
120	92	147	148	119	133	121	93	146	149	118	132	122	94	145	150	117	131
49	176	64	189	203	78	48	177	65	188	202	79	47	178	66	187	201	80
217	35	21	22	218	246	216	34	20	23	219	247	215	33	19	24	220	248
												4	242	235	228	11	39
												207	53	193	60	74	172
												165	158	102	109	137	88
												123	95	144	151	116	130
												46	179	67	186	200	81
												214	32	18	25	221	249
												3	241	236	227	12	40
												208	54	194	59	73	171
												166	157	101	110	138	87
												124	96	143	152	115	129
												45	180	68	185	199	82
												213	31	17	26	222	250
												2	240	237	226	13	41
												209	55	195	58	72	170
												167	156	100	111	139	86
												125	97	142	153	114	128
												44	181	69	184	198	83
												212	30	16	27	223	251
												1	239	238	225	14	42
												210	56	196	57	71	169
												168	155	99	112	140	85
												126	98	141	154	113	127
												43	182	70	183	197	84
												211	29	15	28	224	252

- The letter "6" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.
- The letter "7" is composed of 7 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 252 as given in Example 4.3. The magic sums of each block is $S_{6 \times 6} := 759$.

3.5 Numbers 8 and 9

Example 3.5. Below are letters "8" and "9" written in terms of magic squares of order 6:

5	447	438	421	22	74	6	448	437	422	21	73	7	449	436	423	20	72
386	100	360	109	135	317	385	99	359	110	136	318	384	98	358	111	137	319
308	291	187	204	256	161	307	292	188	203	255	162	306	293	189	202	254	163
230	178	265	282	213	239	229	177	266	281	214	240	228	176	267	280	215	241
83	334	126	343	369	152	84	333	125	344	370	151	85	332	124	345	371	150
395	57	31	48	412	464	396	58	32	47	411	463	397	59	33	46	410	462
4	446	439	420	23	75							8	450	435	424	19	71
387	101	361	108	134	316							383	97	357	112	138	320
309	290	186	205	257	160							305	294	190	201	253	164
231	179	264	283	212	238							227	175	268	279	216	242
82	335	127	342	368	153							86	331	123	346	372	149
394	56	30	49	413	465							398	60	34	45	409	461
3	445	440	419	24	76	10	452	433	426	17	69	9	451	434	425	18	70
388	102	362	107	133	315	381	95	355	114	140	322	382	96	356	113	139	321
310	289	185	206	258	159	303	296	192	199	251	166	304	295	191	200	252	165
232	180	263	284	211	237	225	173	270	277	218	244	226	174	269	278	217	243
81	336	128	341	367	154	88	329	121	348	374	147	87	330	122	347	373	148
393	55	29	50	414	466	400	62	36	43	407	459	399	61	35	44	408	460
2	444	441	418	25	77							11	453	432	427	16	68
389	103	363	106	132	314							380	94	354	115	141	323
311	288	184	207	259	158							302	297	193	198	250	167
233	181	262	285	210	236							224	172	271	276	219	245
80	337	129	340	366	155							89	328	120	349	375	146
392	54	28	51	415	467							401	63	37	42	406	458
1	443	442	417	26	78	13	455	430	429	14	66	12	454	431	428	15	67
390	104	364	105	131	313	378	92	352	117	143	325	379	93	353	116	142	324
312	287	183	208	260	157	300	299	195	196	248	169	301	298	194	197	249	168
234	182	261	286	209	235	222	170	273	274	221	247	223	171	272	275	220	246
79	338	130	339	365	156	91	326	118	351	377	144	90	327	119	350	376	145
391	53	27	52	416	468	403	65	39	40	404	456	402	64	38	41	405	457

4	412	405	388	21	69	5	413	404	389	20	68	6	414	403	390	19	67	
357	93	333	100	124	292	356	92	332	101	125	293	355	91	331	102	126	294	
285	268	172	189	237	148	284	269	173	188	236	149	283	270	174	187	235	150	
213	165	244	261	196	220	212	164	245	260	197	221	211	163	246	259	198	222	
76	309	117	316	340	141	77	308	116	317	341	140	78	307	115	318	342	139	
364	52	28	45	381	429	365	53	29	44	380	428	366	54	30	43	379	427	
3	411	406	387	22	70							7	415	402	391	18	66	
358	94	334	99	123	291							354	90	330	103	127	295	
286	267	171	190	238	147							282	271	175	186	234	151	
214	166	243	262	195	219							210	162	247	258	199	223	
75	310	118	315	339	142							79	306	114	319	343	138	
363	51	27	46	382	430							367	55	31	42	378	426	
2	410	407	386	23	71	1	409	408	385	24	72	8	416	401	392	17	65	
359	95	335	98	122	290	360	96	336	97	121	289	353	89	329	104	128	296	
287	266	170	191	239	146	288	265	169	192	240	145	281	272	176	185	233	152	
215	167	242	263	194	218	216	168	241	264	193	217	209	161	248	257	200	224	
74	311	119	314	338	143	73	312	120	313	337	144	80	305	113	320	344	137	
362	50	26	47	383	431	361	49	25	48	384	432	368	56	32	41	377	425	
													9	417	400	393	16	64
													352	88	328	105	129	297
													280	273	177	184	232	153
													208	160	249	256	201	225
													81	304	112	321	345	136
													369	57	33	40	376	424
12	420	397	396	13	61	11	419	398	395	14	62	10	418	399	394	15	63	
349	85	325	108	132	300	350	86	326	107	131	299	351	87	327	106	130	298	
277	276	180	181	229	156	278	275	179	182	230	155	279	274	178	183	231	154	
205	157	252	253	204	228	206	158	251	254	203	227	207	159	250	255	202	226	
84	301	109	324	348	133	83	302	110	323	347	134	82	303	111	322	346	135	
372	60	36	37	373	421	371	59	35	38	374	422	370	58	34	39	375	423	

- The letter "8" is composed of 13 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 468 as given in Example 4.9. The magic sums of each block is $S_{6 \times 6} := 1407$.
- The letter "9" is composed of 12 blocks of magic squares of order 6 with equal magic sums using the consecutive numbers from 1 to 432 as given in Example 4.8. The magic sums of each block is $S_{6 \times 6} := 1299$.

4 Appendix: Blocks of Magic Squares of Order 6

This section brings construction of blocks of equal magic sums of magic squares of order 6. These blocks are already used in Sections 2 and 4

4.1 5-Blocks

Distribution 4.1. Let's consider the following distribution of 180 numbers in 5 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	10	11	20	21	30	...	...	151	160	161	170	171	180	3258
A2	2	9	12	19	22	29	...	...	152	159	162	169	172	179	3258
A3	3	8	13	18	23	28	...	...	153	158	163	168	173	178	3258
A4	4	7	14	17	24	27	...	...	154	157	164	167	174	177	3258
A5	5	6	15	16	25	26	...	...	155	156	165	166	175	176	3258

Example 4.1. Applying the values given in Distribution 4.1 over the magic square of order 6 given in Example 1.1, we get following 5 magic squares of order 6 with equal magic sums:

(A1)						543
1	171	170	161	10	30	543
150	40	140	41	51	121	543
120	111	71	80	100	61	543
90	70	101	110	81	91	543
31	130	50	131	141	60	543
151	21	11	20	160	180	543
543	543	543	543	543	543	543

(A2)						543
2	172	169	162	9	29	543
149	39	139	42	52	122	543
119	112	72	79	99	62	543
89	69	102	109	82	92	543
32	129	49	132	142	59	543
152	22	12	19	159	179	543
543	543	543	543	543	543	543

(A3)						543
3	173	168	163	8	28	543
148	38	138	43	53	123	543
118	113	73	78	98	63	543
88	68	103	108	83	93	543
33	128	48	133	143	58	543
153	23	13	18	158	178	543
543	543	543	543	543	543	543

(A4)						543
4	174	167	164	7	27	543
147	37	137	44	54	124	543
117	114	74	77	97	64	543
87	67	104	107	84	94	543
34	127	47	134	144	57	543
154	24	14	17	157	177	543
543	543	543	543	543	543	543

(A5)						543
5	175	166	165	6	26	543
146	36	136	45	55	125	543
116	115	75	76	96	65	543
86	66	105	106	85	95	543
35	126	46	135	145	56	543
155	25	15	16	156	176	543
543	543	543	543	543	543	543

4.2 6-Blocks

Distribution 4.2. Let's consider the following distribution of 216 numbers in 6 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	12	13	24	25	36	...	...	181	192	193	204	205	216	3906
A2	2	11	14	23	26	35	...	...	182	191	194	203	206	215	3906
A3	3	10	15	22	27	34	...	...	183	190	195	202	207	214	3906
A4	4	9	16	21	28	33	...	...	184	189	196	201	208	213	3906
A5	5	8	17	20	29	32	...	...	185	188	197	200	209	212	3906
A6	6	7	18	19	30	31	...	...	186	187	198	199	210	211	3906

Example 4.2. Applying the values given in Distribution 4.2 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						651
1	205	204	193	12	36	651
180	48	168	49	61	145	651
144	133	85	96	120	73	651
108	84	121	132	97	109	651
37	156	60	157	169	72	651
181	25	13	24	192	216	651
651	651	651	651	651	651	651

(A2)						651
2	206	203	194	11	35	651
179	47	167	50	62	146	651
143	134	86	95	119	74	651
107	83	122	131	98	110	651
38	155	59	158	170	71	651
182	26	14	23	191	215	651
651	651	651	651	651	651	651

(A3)						651
3	207	202	195	10	34	651
178	46	166	51	63	147	651
142	135	87	94	118	75	651
106	82	123	130	99	111	651
39	154	58	159	171	70	651
183	27	15	22	190	214	651
651	651	651	651	651	651	651

(A4)						651
4	208	201	196	9	33	651
177	45	165	52	64	148	651
141	136	88	93	117	76	651
105	81	124	129	100	112	651
40	153	57	160	172	69	651
184	28	16	21	189	213	651
651	651	651	651	651	651	651

(A5)						651
5	209	200	197	8	32	651
176	44	164	53	65	149	651
140	137	89	92	116	77	651
104	80	125	128	101	113	651
41	152	56	161	173	68	651
185	29	17	20	188	212	651
651	651	651	651	651	651	651

(A6)						651
6	210	199	198	7	31	651
175	43	163	54	66	150	651
139	138	90	91	115	78	651
103	79	126	127	102	114	651
42	151	55	162	174	67	651
186	30	18	19	187	211	651
651	651	651	651	651	651	651

4.3 7-Blocks

Distribution 4.3. Let's consider the following distribution of 252 numbers in 6 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	14	15	28	29	42	...	...	211	224	225	238	239	252	4554
A2	2	13	16	27	30	41	...	...	212	223	226	237	240	251	4554
A3	3	12	17	26	31	40	...	...	213	222	227	236	241	250	4554
A4	4	11	18	25	32	39	...	...	214	221	228	235	242	249	4554
A5	5	10	19	24	33	38	...	...	215	220	229	234	243	248	4554
A6	6	9	20	23	34	37	...	...	216	219	230	233	244	247	4554
A7	7	8	21	22	35	36	...	...	217	218	231	232	245	246	4554

Example 4.3. Applying the values given in Distribution 4.3 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						759
1	239	238	225	14	42	759
210	56	196	57	71	169	759
168	155	99	112	140	85	759
126	98	141	154	113	127	759
43	182	70	183	197	84	759
211	29	15	28	224	252	759
759	759	759	759	759	759	759

(A2)						759
2	240	237	226	13	41	759
209	55	195	58	72	170	759
167	156	100	111	139	86	759
125	97	142	153	114	128	759
44	181	69	184	198	83	759
212	30	16	27	223	251	759
759	759	759	759	759	759	759

(A3)						759
3	241	236	227	12	40	759
208	54	194	59	73	171	759
166	157	101	110	138	87	759
124	96	143	152	115	129	759
45	180	68	185	199	82	759
213	31	17	26	222	250	759
759	759	759	759	759	759	759

(A4)						759
4	242	235	228	11	39	759
207	53	193	60	74	172	759
165	158	102	109	137	88	759
123	95	144	151	116	130	759
46	179	67	186	200	81	759
214	32	18	25	221	249	759
759	759	759	759	759	759	759

(A5)						759
5	243	234	229	10	38	759
206	52	192	61	75	173	759
164	159	103	108	136	89	759
122	94	145	150	117	131	759
47	178	66	187	201	80	759
215	33	19	24	220	248	759
759	759	759	759	759	759	759

(A6)						759
6	244	233	230	9	37	759
205	51	191	62	76	174	759
163	160	104	107	135	90	759
121	93	146	149	118	132	759
48	177	65	188	202	79	759
216	34	20	23	219	247	759
759	759	759	759	759	759	759

(A7)						759
7	245	232	231	8	36	759
204	50	190	63	77	175	759
162	161	105	106	134	91	759
120	92	147	148	119	133	759
49	176	64	189	203	78	759
217	35	21	22	218	246	759
759	759	759	759	759	759	759

4.4 8-Blocks

Distribution 4.4. *Let's consider the following distribution of 288 numbers in 8 blocks of 36 each giving equal sums:*

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	16	17	32	33	48	...	...	241	256	257	272	273	288	5202
A2	2	15	18	31	34	47	...	...	242	255	258	271	274	287	5202
A3	3	14	19	30	35	46	...	...	243	254	259	270	275	286	5202
A4	4	13	20	29	36	45	...	...	244	253	260	269	276	285	5202
A5	5	12	21	28	37	44	...	...	245	252	261	268	277	284	5202
A6	6	11	22	27	38	43	...	...	246	251	262	267	278	283	5202
A7	7	10	23	26	39	42	...	...	247	250	263	266	279	282	5202
A8	8	9	24	25	40	41	...	...	248	249	264	265	280	281	5202

Example 4.4. Applying the values given in Distribution 4.4 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						867
1	273	272	257	16	48	867
240	64	224	65	81	193	867
192	177	113	128	160	97	867
144	112	161	176	129	145	867
49	208	80	209	225	96	867
241	33	17	32	256	288	867
867	867	867	867	867	867	867

(A2)						867
2	274	271	258	15	47	867
239	63	223	66	82	194	867
191	178	114	127	159	98	867
143	111	162	175	130	146	867
50	207	79	210	226	95	867
242	34	18	31	255	287	867
867	867	867	867	867	867	867

(A3)						867
3	275	270	259	14	46	867
238	62	222	67	83	195	867
190	179	115	126	158	99	867
142	110	163	174	131	147	867
51	206	78	211	227	94	867
243	35	19	30	254	286	867
867	867	867	867	867	867	867

(A4)						867
4	276	269	260	13	45	867
237	61	221	68	84	196	867
189	180	116	125	157	100	867
141	109	164	173	132	148	867
52	205	77	212	228	93	867
244	36	20	29	253	285	867
867	867	867	867	867	867	867

(A5)						867
5	277	268	261	12	44	867
236	60	220	69	85	197	867
188	181	117	124	156	101	867
140	108	165	172	133	149	867
53	204	76	213	229	92	867
245	37	21	28	252	284	867
867	867	867	867	867	867	867

(A6)						867
6	278	267	262	11	43	867
235	59	219	70	86	198	867
187	182	118	123	155	102	867
139	107	166	171	134	150	867
54	203	75	214	230	91	867
246	38	22	27	251	283	867
867	867	867	867	867	867	867

(A7)						867
7	279	266	263	10	42	867
234	58	218	71	87	199	867
186	183	119	122	154	103	867
138	106	167	170	135	151	867
55	202	74	215	231	90	867
247	39	23	26	250	282	867
867	867	867	867	867	867	867

(A8)						867
8	280	265	264	9	41	867
233	57	217	72	88	200	867
185	184	120	121	153	104	867
137	105	168	169	136	152	867
56	201	73	216	232	89	867
248	40	24	25	249	281	867
867	867	867	867	867	867	867

4.5 9-Blocks

Distribution 4.5. Let's consider the following distribution of 324 numbers in 9 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	18	19	36	37	54	...	...	271	288	289	306	307	324	5850
A2	2	17	20	35	38	53	...	...	272	287	290	305	308	323	5850
A3	3	16	21	34	39	52	...	...	273	286	291	304	309	322	5850
A4	4	15	22	33	40	51	...	...	274	285	292	303	310	321	5850
A5	5	14	23	32	41	50	...	...	275	284	293	302	311	320	5850
A6	6	13	24	31	42	49	...	...	276	283	294	301	312	319	5850
A7	7	12	25	30	43	48	...	...	277	282	295	300	313	318	5850
A8	8	11	26	29	44	47	...	...	278	281	296	299	314	317	5850
A9	9	10	27	28	45	46	...	...	279	280	297	298	315	316	5850

Example 4.5. Applying the values given in Distribution 4.5 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						975
1	307	306	289	18	54	975
270	72	252	73	91	217	975
216	199	127	144	180	109	975
162	126	181	198	145	163	975
55	234	90	235	253	108	975
271	37	19	36	288	324	975
975	975	975	975	975	975	975

(A2)						975
2	308	305	290	17	53	975
269	71	251	74	92	218	975
215	200	128	143	179	110	975
161	125	182	197	146	164	975
56	233	89	236	254	107	975
272	38	20	35	287	323	975
975	975	975	975	975	975	975

(A3)						975
3	309	304	291	16	52	975
268	70	250	75	93	219	975
214	201	129	142	178	111	975
160	124	183	196	147	165	975
57	232	88	237	255	106	975
273	39	21	34	286	322	975
975	975	975	975	975	975	975

(A4)						975
4	310	303	292	15	51	975
267	69	249	76	94	220	975
213	202	130	141	177	112	975
159	123	184	195	148	166	975
58	231	87	238	256	105	975
274	40	22	33	285	321	975
975	975	975	975	975	975	975

(A5)						975
5	311	302	293	14	50	975
266	68	248	77	95	221	975
212	203	131	140	176	113	975
158	122	185	194	149	167	975
59	230	86	239	257	104	975
275	41	23	32	284	320	975
975	975	975	975	975	975	975

(A6)						975
6	312	301	294	13	49	975
265	67	247	78	96	222	975
211	204	132	139	175	114	975
157	121	186	193	150	168	975
60	229	85	240	258	103	975
276	42	24	31	283	319	975
975	975	975	975	975	975	975

(A7)						975
7	313	300	295	12	48	975
264	66	246	79	97	223	975
210	205	133	138	174	115	975
156	120	187	192	151	169	975
61	228	84	241	259	102	975
277	43	25	30	282	318	975
975	975	975	975	975	975	975

(A8)						975
8	314	299	296	11	47	975
263	65	245	80	98	224	975
209	206	134	137	173	116	975
155	119	188	191	152	170	975
62	227	83	242	260	101	975
278	44	26	29	281	317	975
975	975	975	975	975	975	975

(A9)						975
9	315	298	297	10	46	975
262	64	244	81	99	225	975
208	207	135	136	172	117	975
154	118	189	190	153	171	975
63	226	82	243	261	100	975
279	45	27	28	280	316	975
975	975	975	975	975	975	975

4.6 10-Blocks

Distribution 4.6. Let's consider the following distribution of 360 numbers in 10 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	20	21	40	41	60	...	...	301	320	321	340	341	360	6498
A2	2	19	22	39	42	59	...	...	302	319	322	339	342	359	6498
A3	3	18	23	38	43	58	...	...	303	318	323	338	343	358	6498
A4	4	17	24	37	44	57	...	...	304	317	324	337	344	357	6498
A5	5	16	25	36	45	56	...	...	305	316	325	336	345	356	6498
A6	6	15	26	35	46	55	...	...	306	315	326	335	346	355	6498
A7	7	14	27	34	47	54	...	...	307	314	327	334	347	354	6498
A8	8	13	28	33	48	53	...	...	308	313	328	333	348	353	6498
A9	9	12	29	32	49	52	...	...	309	312	329	332	349	352	6498
A10	10	11	30	31	50	51	...	...	310	311	330	331	350	351	6498

Example 4.6. Applying the values given in Distribution 4.6 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1083
1	341	340	321	20	60	1083
300	80	280	81	101	241	1083
240	221	141	160	200	121	1083
180	140	201	220	161	181	1083
61	260	100	261	281	120	1083
301	41	21	40	320	360	1083
1083	1083	1083	1083	1083	1083	1083

(A2)						1083
2	342	339	322	19	59	1083
299	79	279	82	102	242	1083
239	222	142	159	199	122	1083
179	139	202	219	162	182	1083
62	259	99	262	282	119	1083
302	42	22	39	319	359	1083
1083	1083	1083	1083	1083	1083	1083

(A3)						1083
3	343	338	323	18	58	1083
298	78	278	83	103	243	1083
238	223	143	158	198	123	1083
178	138	203	218	163	183	1083
63	258	98	263	283	118	1083
303	43	23	38	318	358	1083
1083	1083	1083	1083	1083	1083	1083

(A4)						1083
4	344	337	324	17	57	1083
297	77	277	84	104	244	1083
237	224	144	157	197	124	1083
177	137	204	217	164	184	1083
64	257	97	264	284	117	1083
304	44	24	37	317	357	1083
1083	1083	1083	1083	1083	1083	1083

(A5)						1083
5	345	336	325	16	56	1083
296	76	276	85	105	245	1083
236	225	145	156	196	125	1083
176	136	205	216	165	185	1083
65	256	96	265	285	116	1083
305	45	25	36	316	356	1083
1083	1083	1083	1083	1083	1083	1083

(A6)						1083
6	346	335	326	15	55	1083
295	75	275	86	106	246	1083
235	226	146	155	195	126	1083
175	135	206	215	166	186	1083
66	255	95	266	286	115	1083
306	46	26	35	315	355	1083
1083	1083	1083	1083	1083	1083	1083

(A7)						1083
7	347	334	327	14	54	1083
294	74	274	87	107	247	1083
234	227	147	154	194	127	1083
174	134	207	214	167	187	1083
67	254	94	267	287	114	1083
307	47	27	34	314	354	1083
1083	1083	1083	1083	1083	1083	1083

(A8)						1083
8	348	333	328	13	53	1083
293	73	273	88	108	248	1083
233	228	148	153	193	128	1083
173	133	208	213	168	188	1083
68	253	93	268	288	113	1083
308	48	28	33	313	353	1083
1083	1083	1083	1083	1083	1083	1083

(A9)						1083
9	349	332	329	12	52	1083
292	72	272	89	109	249	1083
232	229	149	152	192	129	1083
172	132	209	212	169	189	1083
69	252	92	269	289	112	1083
309	49	29	32	312	352	1083
1083	1083	1083	1083	1083	1083	1083

(A10)						1083
10	350	331	330	11	51	1083
291	71	271	90	110	250	1083
231	230	150	151	191	130	1083
171	131	210	211	170	190	1083
70	251	91	270	290	111	1083
310	50	30	31	311	351	1083
1083	1083	1083	1083	1083	1083	1083

4.7 11-Blocks

Distribution 4.7. Let's consider the following distribution of 396 numbers in 11 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	22	23	44	45	66	...	...	331	352	353	374	375	396	7146
A2	2	21	24	43	46	65	...	...	332	351	354	373	376	395	7146
A3	3	20	25	42	47	64	...	...	333	350	355	372	377	394	7146
A4	4	19	26	41	48	63	...	...	334	349	356	371	378	393	7146
A5	5	18	27	40	49	62	...	...	335	348	357	370	379	392	7146
A6	6	17	28	39	50	61	...	...	336	347	358	369	380	391	7146
A7	7	16	29	38	51	60	...	...	337	346	359	368	381	390	7146
A8	8	15	30	37	52	59	...	...	338	345	360	367	382	389	7146
A9	9	14	31	36	53	58	...	...	339	344	361	366	383	388	7146
A10	10	13	32	35	54	57	...	...	340	343	362	365	384	387	7146
A11	11	12	33	34	55	56	...	...	341	342	363	364	385	386	7146

Example 4.7. Applying the values given in Distribution 4.7 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1191
1	375	374	353	22	66	1191
330	88	308	89	111	265	1191
264	243	155	176	220	133	1191
198	154	221	242	177	199	1191
67	286	110	287	309	132	1191
331	45	23	44	352	396	1191
1191	1191	1191	1191	1191	1191	1191

(A2)						1191
2	376	373	354	21	65	1191
329	87	307	90	112	266	1191
263	244	156	175	219	134	1191
197	153	222	241	178	200	1191
68	285	109	288	310	131	1191
332	46	24	43	351	395	1191
1191	1191	1191	1191	1191	1191	1191

(A3)						1191
3	377	372	355	20	64	1191
328	86	306	91	113	267	1191
262	245	157	174	218	135	1191
196	152	223	240	179	201	1191
69	284	108	289	311	130	1191
333	47	25	42	350	394	1191
1191	1191	1191	1191	1191	1191	1191

(A4)						1191
4	378	371	356	19	63	1191
327	85	305	92	114	268	1191
261	246	158	173	217	136	1191
195	151	224	239	180	202	1191
70	283	107	290	312	129	1191
334	48	26	41	349	393	1191
1191	1191	1191	1191	1191	1191	1191

(A5)						1191
5	379	370	357	18	62	1191
326	84	304	93	115	269	1191
260	247	159	172	216	137	1191
194	150	225	238	181	203	1191
71	282	106	291	313	128	1191
335	49	27	40	348	392	1191
1191	1191	1191	1191	1191	1191	1191

(A6)						1191
6	380	369	358	17	61	1191
325	83	303	94	116	270	1191
259	248	160	171	215	138	1191
193	149	226	237	182	204	1191
72	281	105	292	314	127	1191
336	50	28	39	347	391	1191
1191	1191	1191	1191	1191	1191	1191

(A7)						1191
7	381	368	359	16	60	1191
324	82	302	95	117	271	1191
258	249	161	170	214	139	1191
192	148	227	236	183	205	1191
73	280	104	293	315	126	1191
337	51	29	38	346	390	1191
1191	1191	1191	1191	1191	1191	1191

(A8)						1191
8	382	367	360	15	59	1191
323	81	301	96	118	272	1191
257	250	162	169	213	140	1191
191	147	228	235	184	206	1191
74	279	103	294	316	125	1191
338	52	30	37	345	389	1191
1191	1191	1191	1191	1191	1191	1191

(A9)						1191
9	383	366	361	14	58	1191
322	80	300	97	119	273	1191
256	251	163	168	212	141	1191
190	146	229	234	185	207	1191
75	278	102	295	317	124	1191
339	53	31	36	344	388	1191
1191	1191	1191	1191	1191	1191	1191

(A10)						1191
10	384	365	362	13	57	1191
321	79	299	98	120	274	1191
255	252	164	167	211	142	1191
189	145	230	233	186	208	1191
76	277	101	296	318	123	1191
340	54	32	35	343	387	1191
1191	1191	1191	1191	1191	1191	1191

(A11)						1191
11	385	364	363	12	56	1191
320	78	298	99	121	275	1191
254	253	165	166	210	143	1191
188	144	231	232	187	209	1191
77	276	100	297	319	122	1191
341	55	33	34	342	386	1191
1191	1191	1191	1191	1191	1191	1191

4.8 12-Blocks

Distribution 4.8. Let's consider the following distribution of 432 numbers in 12 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	24	25	48	49	72	...	...	361	384	385	408	409	432	7794
A2	2	23	26	47	50	71	...	...	362	383	386	407	410	431	7794
A3	3	22	27	46	51	70	...	...	363	382	387	406	411	430	7794
A4	4	21	28	45	52	69	...	...	364	381	388	405	412	429	7794
A5	5	20	29	44	53	68	...	...	365	380	389	404	413	428	7794
A6	6	19	30	43	54	67	...	...	366	379	390	403	414	427	7794
A7	7	18	31	42	55	66	...	...	367	378	391	402	415	426	7794
A8	8	17	32	41	56	65	...	...	368	377	392	401	416	425	7794
A9	9	16	33	40	57	64	...	...	369	376	393	400	417	424	7794
A10	10	15	34	39	58	63	...	...	370	375	394	399	418	423	7794
A11	11	14	35	38	59	62	...	...	371	374	395	398	419	422	7794
A12	12	13	36	37	60	61	...	...	372	373	396	397	420	421	7794

Example 4.8. Applying the values given in Distribution 4.8 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1299
1	409	408	385	24	72	1299
360	96	336	97	121	289	1299
288	265	169	192	240	145	1299
216	168	241	264	193	217	1299
73	312	120	313	337	144	1299
361	49	25	48	384	432	1299
1299	1299	1299	1299	1299	1299	1299

(A2)						1299
2	410	407	386	23	71	1299
359	95	335	98	122	290	1299
287	266	170	191	239	146	1299
215	167	242	263	194	218	1299
74	311	119	314	338	143	1299
362	50	26	47	383	431	1299
1299	1299	1299	1299	1299	1299	1299

(A3)						1299
3	411	406	387	22	70	1299
358	94	334	99	123	291	1299
286	267	171	190	238	147	1299
214	166	243	262	195	219	1299
75	310	118	315	339	142	1299
363	51	27	46	382	430	1299
1299	1299	1299	1299	1299	1299	1299

(A4)						1299
4	412	405	388	21	69	1299
357	93	333	100	124	292	1299
285	268	172	189	237	148	1299
213	165	244	261	196	220	1299
76	309	117	316	340	141	1299
364	52	28	45	381	429	1299
1299	1299	1299	1299	1299	1299	1299

(A5)						1299
5	413	404	389	20	68	1299
356	92	332	101	125	293	1299
284	269	173	188	236	149	1299
212	164	245	260	197	221	1299
77	308	116	317	341	140	1299
365	53	29	44	380	428	1299
1299	1299	1299	1299	1299	1299	1299

(A6)						1299
6	414	403	390	19	67	1299
355	91	331	102	126	294	1299
283	270	174	187	235	150	1299
211	163	246	259	198	222	1299
78	307	115	318	342	139	1299
366	54	30	43	379	427	1299
1299	1299	1299	1299	1299	1299	1299

(A7)						1299
7	415	402	391	18	66	1299
354	90	330	103	127	295	1299
282	271	175	186	234	151	1299
210	162	247	258	199	223	1299
79	306	114	319	343	138	1299
367	55	31	42	378	426	1299
1299	1299	1299	1299	1299	1299	1299

(A8)						1299
8	416	401	392	17	65	1299
353	89	329	104	128	296	1299
281	272	176	185	233	152	1299
209	161	248	257	200	224	1299
80	305	113	320	344	137	1299
368	56	32	41	377	425	1299
1299	1299	1299	1299	1299	1299	1299

(A9)						1299
9	417	400	393	16	64	1299
352	88	328	105	129	297	1299
280	273	177	184	232	153	1299
208	160	249	256	201	225	1299
81	304	112	321	345	136	1299
369	57	33	40	376	424	1299
1299	1299	1299	1299	1299	1299	1299

(A10)						1299
10	418	399	394	15	63	1299
351	87	327	106	130	298	1299
279	274	178	183	231	154	1299
207	159	250	255	202	226	1299
82	303	111	322	346	135	1299
370	58	34	39	375	423	1299
1299	1299	1299	1299	1299	1299	1299

(A11)						1299
11	419	398	395	14	62	1299
350	86	326	107	131	299	1299
278	275	179	182	230	155	1299
206	158	251	254	203	227	1299
83	302	110	323	347	134	1299
371	59	35	38	374	422	1299
1299	1299	1299	1299	1299	1299	1299

(A12)						1299
12	420	397	396	13	61	1299
349	85	325	108	132	300	1299
277	276	180	181	229	156	1299
205	157	252	253	204	228	1299
84	301	109	324	348	133	1299
372	60	36	37	373	421	1299
1299	1299	1299	1299	1299	1299	1299

4.9 13-Blocks

Distribution 4.9. Let's consider the following distribution of 468 numbers in 13 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	26	27	52	53	78	...	...	391	416	417	442	443	468	8442
A2	2	25	28	51	54	77	...	...	392	415	418	441	444	467	8442
A3	3	24	29	50	55	76	...	...	393	414	419	440	445	466	8442
A4	4	23	30	49	56	75	...	...	394	413	420	439	446	465	8442
A5	5	22	31	48	57	74	...	...	395	412	421	438	447	464	8442
A6	6	21	32	47	58	73	...	...	396	411	422	437	448	463	8442
A7	7	20	33	46	59	72	...	...	397	410	423	436	449	462	8442
A8	8	19	34	45	60	71	...	...	398	409	424	435	450	461	8442
A9	9	18	35	44	61	70	...	...	399	408	425	434	451	460	8442
A10	10	17	36	43	62	69	...	...	400	407	426	433	452	459	8442
A11	11	16	37	42	63	68	...	...	401	406	427	432	453	458	8442
A12	12	15	38	41	64	67	...	...	402	405	428	431	454	457	8442
A13	13	14	39	40	65	66	...	...	403	404	429	430	455	456	8442

Example 4.9. Applying the values given in Distribution 4.9 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1407
1	443	442	417	26	78	1407
390	104	364	105	131	313	1407
312	287	183	208	260	157	1407
234	182	261	286	209	235	1407
79	338	130	339	365	156	1407
391	53	27	52	416	468	1407
1407	1407	1407	1407	1407	1407	1407

(A2)						1407
2	444	441	418	25	77	1407
389	103	363	106	132	314	1407
311	288	184	207	259	158	1407
233	181	262	285	210	236	1407
80	337	129	340	366	155	1407
392	54	28	51	415	467	1407
1407	1407	1407	1407	1407	1407	1407

(A3)						1407
3	445	440	419	24	76	1407
388	102	362	107	133	315	1407
310	289	185	206	258	159	1407
232	180	263	284	211	237	1407
81	336	128	341	367	154	1407
393	55	29	50	414	466	1407
1407	1407	1407	1407	1407	1407	1407

(A4)						1407
4	446	439	420	23	75	1407
387	101	361	108	134	316	1407
309	290	186	205	257	160	1407
231	179	264	283	212	238	1407
82	335	127	342	368	153	1407
394	56	30	49	413	465	1407
1407	1407	1407	1407	1407	1407	1407

(A5)						1407
5	447	438	421	22	74	1407
386	100	360	109	135	317	1407
308	291	187	204	256	161	1407
230	178	265	282	213	239	1407
83	334	126	343	369	152	1407
395	57	31	48	412	464	1407
1407	1407	1407	1407	1407	1407	1407

(A6)						1407
6	448	437	422	21	73	1407
385	99	359	110	136	318	1407
307	292	188	203	255	162	1407
229	177	266	281	214	240	1407
84	333	125	344	370	151	1407
396	58	32	47	411	463	1407
1407	1407	1407	1407	1407	1407	1407

(A7)						1407
7	449	436	423	20	72	1407
384	98	358	111	137	319	1407
306	293	189	202	254	163	1407
228	176	267	280	215	241	1407
85	332	124	345	371	150	1407
397	59	33	46	410	462	1407
1407	1407	1407	1407	1407	1407	1407

(A8)						1407
8	450	435	424	19	71	1407
383	97	357	112	138	320	1407
305	294	190	201	253	164	1407
227	175	268	279	216	242	1407
86	331	123	346	372	149	1407
398	60	34	45	409	461	1407
1407	1407	1407	1407	1407	1407	1407

(A9)						1407
9	451	434	425	18	70	1407
382	96	356	113	139	321	1407
304	295	191	200	252	165	1407
226	174	269	278	217	243	1407
87	330	122	347	373	148	1407
399	61	35	44	408	460	1407
1407	1407	1407	1407	1407	1407	1407

(A10)						1407
10	452	433	426	17	69	1407
381	95	355	114	140	322	1407
303	296	192	199	251	166	1407
225	173	270	277	218	244	1407
88	329	121	348	374	147	1407
400	62	36	43	407	459	1407
1407	1407	1407	1407	1407	1407	1407

(A11)						1407
11	453	432	427	16	68	1407
380	94	354	115	141	323	1407
302	297	193	198	250	167	1407
224	172	271	276	219	245	1407
89	328	120	349	375	146	1407
401	63	37	42	406	458	1407
1407	1407	1407	1407	1407	1407	1407

(A12)						1407
12	454	431	428	15	67	1407
379	93	353	116	142	324	1407
301	298	194	197	249	168	1407
223	171	272	275	220	246	1407
90	327	119	350	376	145	1407
402	64	38	41	405	457	1407
1407	1407	1407	1407	1407	1407	1407

(A13)						1407
13	455	430	429	14	66	1407
378	92	352	117	143	325	1407
300	299	195	196	248	169	1407
222	170	273	274	221	247	1407
91	326	118	351	377	144	1407
403	65	39	40	404	456	1407
1407	1407	1407	1407	1407	1407	1407

4.10 14-Blocks

Distribution 4.10. Let's consider the following distribution of 504 numbers in 14 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	28	29	56	57	84	...	...	421	448	449	476	477	504	9090
A2	2	27	30	55	58	83	...	...	422	447	450	475	478	503	9090
A3	3	26	31	54	59	82	...	...	423	446	451	474	479	502	9090
A4	4	25	32	53	60	81	...	...	424	445	452	473	480	501	9090
A5	5	24	33	52	61	80	...	...	425	444	453	472	481	500	9090
A6	6	23	34	51	62	79	...	...	426	443	454	471	482	499	9090
A7	7	22	35	50	63	78	...	...	427	442	455	470	483	498	9090
A8	8	21	36	49	64	77	...	...	428	441	456	469	484	497	9090
A9	9	20	37	48	65	76	...	...	429	440	457	468	485	496	9090
A10	10	19	38	47	66	75	...	...	430	439	458	467	486	495	9090
A11	11	18	39	46	67	74	...	...	431	438	459	466	487	494	9090
A12	12	17	40	45	68	73	...	...	432	437	460	465	488	493	9090
A13	13	16	41	44	69	72	...	...	433	436	461	464	489	492	9090
A14	14	15	42	43	70	71	...	...	434	435	462	463	490	491	9090

Example 4.10. Applying the values given in Distribution 4.10 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1515
1	477	476	449	28	84	1515
420	112	392	113	141	337	1515
336	309	197	224	280	169	1515
252	196	281	308	225	253	1515
85	364	140	365	393	168	1515
421	57	29	56	448	504	1515
1515	1515	1515	1515	1515	1515	1515

(A2)						1515
2	478	475	450	27	83	1515
419	111	391	114	142	338	1515
335	310	198	223	279	170	1515
251	195	282	307	226	254	1515
86	363	139	366	394	167	1515
422	58	30	55	447	503	1515
1515	1515	1515	1515	1515	1515	1515

(A3)						1515
3	479	474	451	26	82	1515
418	110	390	115	143	339	1515
334	311	199	222	278	171	1515
250	194	283	306	227	255	1515
87	362	138	367	395	166	1515
423	59	31	54	446	502	1515
1515	1515	1515	1515	1515	1515	1515

(A4)						1515
4	480	473	452	25	81	1515
417	109	389	116	144	340	1515
333	312	200	221	277	172	1515
249	193	284	305	228	256	1515
88	361	137	368	396	165	1515
424	60	32	53	445	501	1515
1515	1515	1515	1515	1515	1515	1515

(A5)						1515
5	481	472	453	24	80	1515
416	108	388	117	145	341	1515
332	313	201	220	276	173	1515
248	192	285	304	229	257	1515
89	360	136	369	397	164	1515
425	61	33	52	444	500	1515
1515	1515	1515	1515	1515	1515	1515

(A6)						1515
6	482	471	454	23	79	1515
415	107	387	118	146	342	1515
331	314	202	219	275	174	1515
247	191	286	303	230	258	1515
90	359	135	370	398	163	1515
426	62	34	51	443	499	1515
1515	1515	1515	1515	1515	1515	1515

(A7)						1515
7	483	470	455	22	78	1515
414	106	386	119	147	343	1515
330	315	203	218	274	175	1515
246	190	287	302	231	259	1515
91	358	134	371	399	162	1515
427	63	35	50	442	498	1515
1515	1515	1515	1515	1515	1515	1515

(A8)						1515
8	484	469	456	21	77	1515
413	105	385	120	148	344	1515
329	316	204	217	273	176	1515
245	189	288	301	232	260	1515
92	357	133	372	400	161	1515
428	64	36	49	441	497	1515
1515	1515	1515	1515	1515	1515	1515

(A9)						1515
9	485	468	457	20	76	1515
412	104	384	121	149	345	1515
328	317	205	216	272	177	1515
244	188	289	300	233	261	1515
93	356	132	373	401	160	1515
429	65	37	48	440	496	1515
1515	1515	1515	1515	1515	1515	1515

(A10)						1515
10	486	467	458	19	75	1515
411	103	383	122	150	346	1515
327	318	206	215	271	178	1515
243	187	290	299	234	262	1515
94	355	131	374	402	159	1515
430	66	38	47	439	495	1515
1515	1515	1515	1515	1515	1515	1515

(A11)						1515
11	487	466	459	18	74	1515
410	102	382	123	151	347	1515
326	319	207	214	270	179	1515
242	186	291	298	235	263	1515
95	354	130	375	403	158	1515
431	67	39	46	438	494	1515
1515	1515	1515	1515	1515	1515	1515

(A12)						1515
12	488	465	460	17	73	1515
409	101	381	124	152	348	1515
325	320	208	213	269	180	1515
241	185	292	297	236	264	1515
96	353	129	376	404	157	1515
432	68	40	45	437	493	1515
1515	1515	1515	1515	1515	1515	1515

(A13)						1515
13	489	464	461	16	72	1515
408	100	380	125	153	349	1515
324	321	209	212	268	181	1515
240	184	293	296	237	265	1515
97	352	128	377	405	156	1515
433	69	41	44	436	492	1515
1515	1515	1515	1515	1515	1515	1515

(A14)						1515
14	490	463	462	15	71	1515
407	99	379	126	154	350	1515
323	322	210	211	267	182	1515
239	183	294	295	238	266	1515
98	351	127	378	406	155	1515
434	70	42	43	435	491	1515
1515	1515	1515	1515	1515	1515	1515

4.11 15-Blocks

Distribution 4.11. Let's consider the following distribution of 540 numbers in 15 blocks of 36 each giving equal sums:

	1	2	3	4	5	6	...	...	31	32	33	34	35	36	Total
A1	1	30	31	60	61	90	...	...	451	480	481	510	511	540	9738
A2	2	29	32	59	62	89	...	...	452	479	482	509	512	539	9738
A3	3	28	33	58	63	88	...	...	453	478	483	508	513	538	9738
A4	4	27	34	57	64	87	...	...	454	477	484	507	514	537	9738
A5	5	26	35	56	65	86	...	...	455	476	485	506	515	536	9738
A6	6	25	36	55	66	85	...	...	456	475	486	505	516	535	9738
A7	7	24	37	54	67	84	...	...	457	474	487	504	517	534	9738
A8	8	23	38	53	68	83	...	...	458	473	488	503	518	533	9738
A9	9	22	39	52	69	82	...	...	459	472	489	502	519	532	9738
A10	10	21	40	51	70	81	...	...	460	471	490	501	520	531	9738
A11	11	20	41	50	71	80	...	...	461	470	491	500	521	530	9738
A12	12	19	42	49	72	79	...	...	462	469	492	499	522	529	9738
A13	13	18	43	48	73	78	...	...	463	468	493	498	523	528	9738
A14	14	17	44	47	74	77	...	...	464	467	494	497	524	527	9738
A15	15	16	45	46	75	76	...	...	465	466	495	496	525	526	9738

Example 4.11. Applying the values given in Distribution 4.11 over the magic square of order 6 given in Example 1.1, we get following 6 magic squares of order 6 with equal magic sums:

(A1)						1623
1	511	510	481	30	90	1623
450	120	420	121	151	361	1623
360	331	211	240	300	181	1623
270	210	301	330	241	271	1623
91	390	150	391	421	180	1623
451	61	31	60	480	540	1623
1623	1623	1623	1623	1623	1623	1623

(A2)						1623
2	512	509	482	29	89	1623
449	119	419	122	152	362	1623
359	332	212	239	299	182	1623
269	209	302	329	242	272	1623
92	389	149	392	422	179	1623
452	62	32	59	479	539	1623
1623	1623	1623	1623	1623	1623	1623

(A3)						1623
3	513	508	483	28	88	1623
448	118	418	123	153	363	1623
358	333	213	238	298	183	1623
268	208	303	328	243	273	1623
93	388	148	393	423	178	1623
453	63	33	58	478	538	1623
1623	1623	1623	1623	1623	1623	1623

(A4)						1623
4	514	507	484	27	87	1623
447	117	417	124	154	364	1623
357	334	214	237	297	184	1623
267	207	304	327	244	274	1623
94	387	147	394	424	177	1623
454	64	34	57	477	537	1623
1623	1623	1623	1623	1623	1623	1623

(A5)						1623
5	515	506	485	26	86	1623
446	116	416	125	155	365	1623
356	335	215	236	296	185	1623
266	206	305	326	245	275	1623
95	386	146	395	425	176	1623
455	65	35	56	476	536	1623
1623	1623	1623	1623	1623	1623	1623

(A6)						1623
6	516	505	486	25	85	1623
445	115	415	126	156	366	1623
355	336	216	235	295	186	1623
265	205	306	325	246	276	1623
96	385	145	396	426	175	1623
456	66	36	55	475	535	1623
1623	1623	1623	1623	1623	1623	1623

(A7)						1623
7	517	504	487	24	84	1623
444	114	414	127	157	367	1623
354	337	217	234	294	187	1623
264	204	307	324	247	277	1623
97	384	144	397	427	174	1623
457	67	37	54	474	534	1623
1623	1623	1623	1623	1623	1623	1623

(A8)						1623
8	518	503	488	23	83	1623
443	113	413	128	158	368	1623
353	338	218	233	293	188	1623
263	203	308	323	248	278	1623
98	383	143	398	428	173	1623
458	68	38	53	473	533	1623
1623	1623	1623	1623	1623	1623	1623

(A9)						1623
9	519	502	489	22	82	1623
442	112	412	129	159	369	1623
352	339	219	232	292	189	1623
262	202	309	322	249	279	1623
99	382	142	399	429	172	1623
459	69	39	52	472	532	1623
1623	1623	1623	1623	1623	1623	1623

(A10)						1623
10	520	501	490	21	81	1623
441	111	411	130	160	370	1623
351	340	220	231	291	190	1623
261	201	310	321	250	280	1623
100	381	141	400	430	171	1623
460	70	40	51	471	531	1623
1623	1623	1623	1623	1623	1623	1623

(A11)						1623
11	521	500	491	20	80	1623
440	110	410	131	161	371	1623
350	341	221	230	290	191	1623
260	200	311	320	251	281	1623
101	380	140	401	431	170	1623
461	71	41	50	470	530	1623
1623	1623	1623	1623	1623	1623	1623

(A12)						1623
12	522	499	492	19	79	1623
439	109	409	132	162	372	1623
349	342	222	229	289	192	1623
259	199	312	319	252	282	1623
102	379	139	402	432	169	1623
462	72	42	49	469	529	1623
1623	1623	1623	1623	1623	1623	1623

(A13)						1623
13	523	498	493	18	78	1623
438	108	408	133	163	373	1623
348	343	223	228	288	193	1623
258	198	313	318	253	283	1623
103	378	138	403	433	168	1623
463	73	43	48	468	528	1623
1623	1623	1623	1623	1623	1623	1623

(A14)						1623
14	524	497	494	17	77	1623
437	107	407	134	164	374	1623
347	344	224	227	287	194	1623
257	197	314	317	254	284	1623
104	377	137	404	434	167	1623
464	74	44	47	467	527	1623
1623	1623	1623	1623	1623	1623	1623

(A15)						1623
15	525	496	495	16	76	1623
436	106	406	135	165	375	1623
346	345	225	226	286	195	1623
256	196	315	316	255	285	1623
105	376	136	405	435	166	1623
465	75	45	46	466	526	1623
1623	1623	1623	1623	1623	1623	1623

5 Final Comments

This work brings 26 letters from A to Z and 10 numbers from 0 to 9 in terms of blocks of magic squares of order 6. Letters and numbers are constructed with blocks of equal sums magic square of order 6. The most of the letters and numbers constructed are with 5-blocks height. The table below give an idea of block-wise construction of letters and numbers:

Consecutive Numbers	Number of Blocks	Equal Magic Sums	Letters	Numbers
1-180	5	543		1
1-216	6	651		
1-252	7	759	I; L; T	7
1-288	8	867	F; J; Y	
1-324	9	975	V; X; Z	4
1-360	10	1083	A; D; E; G; K; P	
1-396	11	1191	C; H; R; U	2; 3; 5
1-432	12	1299	B; O; R	0; 6; 9
1-468	13	1407	N; Q	8
1-504	14	1515		
1-540	15	1623	M; W	

By no way, we can say that the these are the only possible ways. These constructions can be done in different ways too. The next work is dedicated to the constructions of letters and numbers using equal sums magic squares of order 8.

During past years the author worked with magic squares in different situations. See below the details:

5.1 Author's Contributions to Magic Squares

The item-wise author's work on magic squares is as follows:

- (i) **Digital numbers** magic squares - [2, 3, 4, 5, 6, 7];
- (ii) **Block-wise construction of bimagic squares** - [8];
- (iii) Connections with **genetic tables** and **Shannon's entropy** - [9];
- (iv) **Selfie** and **palindromic-type** magic squares - [10];
- (v) **Intervally distributed** and **block-wise** magic squares - [11, 12, 13];
- (vi) **Multi-digits** magic squares - [14];
- (vii) **Perfect square sum** magic squares with **uniformity**, **minimum sum** and **Pythagorean triples** - [15, 16];
- (viii) **Block-wise** equal sums **pan magic squares of order $4k$** - [17];
- (ix) **Block-wise** equal and unequal sums **magic squares of order $3k$** - [18, 19];
- (x) **Magic rectangles** in construction of **block-wise pan magic squares** - [20];
- (xi) **Magic Crosses: Repeated and Non Repeated Entries** - [21];
- (xii) **Letters and Numbers with Equal Sums Magic Squares of Order 4** - [22].

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