

929 The School of Athens



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Instructions

Thank you for choosing Golden Kite products!
We hope you will have lots of fun with this cross-stitch pattern!

Fabric

Press the fabric with an iron if needed. A good thing to prevent the fabric from fraying is to machine zigzag the edges.

On large patterns, it is easiest to start from the upper left corner of the design. Make sure you have the proper margins before starting and that the fabric piece is of the correct size. The best way to verify this is to count all stitch positions on the fabric from the upper left corner downwards and to the right to make sure there is enough space for the design.

Some prefer to start in the center of the design instead. To locate the center of the fabric, fold the fabric in half both vertically and horizontally. The center is located where these two folds meet.

Stitches

Each length of DMC tread consists of six strands.
Use two of these strands for all stitches.

Note that some colors may be mixes (or blends) between two different pure colors. In that case take one strand of the two colors each and thread the two strands into the needle at the same time for stitching.

All stitches are full cross-stitches. No half-stitching and no back-stitching is necessary in this pattern.

All cross-stitches will be worked into the holes in the fabric from left to right. Always use the larger holes in the fabric for the stitches. Adjacent stitches should meet in the same hole. Make sure all stitches cross in the same direction.

Please be careful when washing the finished embroidery! The cotton thread may bleed when washed. Only hand wash it in lukewarm water. Remove excess water by roll it in a towel and lay it flat to air dry. Natural fabrics may shrink slightly when washed. We do not recommend washing the embroidery if not absolutely necessary and we take no responsibility for any damage that may occur.

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The School of Athens

Stitch Count	
Horizontal:	960
Vertical:	744
















































Recommended Fabric Color
Antique White

This table tells the size of the pattern (without any margins) and the size of the fabric required to stitch the pattern (including recommended margins). 3 inch margins have been added on each side in the 'Including Margins' row.

The sizes are given for 14, 16 and 18 stitches per inch fabrics.

Make sure to use the 'Including Margins' row when cutting the piece of fabric to be used. Also make sure that 3 inch margins are enough for your stitching technique and add more margin areas if necessary.

	14				16				18			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	174	68.46	135	53.03	153	59.9	118	46.4	136	53.25	105	41.25
Including Margins:	190	75	151	60	169	66	134	53	152	60	121	48
	10				12				24			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	243	95.84	189	74.24	203	79.87	157	61.86	101	39.93	78	30.93
Including Margins:	259	102	205	81	219	86	173	68	117	46	94	37
	25				26				27			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	97	38.33	75	29.69	93	36.86	72	28.55	90	35.49	70	27.49
Including Margins:	113	45	91	36	109	43	88	35	106	42	86	34
	28				30				32			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	87	34.23	67	26.51	81	31.94	63	24.74	76	29.95	59	23.2
Including Margins:	103	41	83	33	97	38	79	31	92	36	75	30

Solid Color Stitches. Use two strands of the specified color for these stitches.		
Symbol	DMC	Name
	310	Black
	318	Steel Gray-LT
	341	Blue Violet-LT
	370	Mustard-MD
	371	Mustard
	372	Mustard-LT
	413	Pewter Gray-DK
	420	Hazelnut Brown-DK
	433	Brown-MD
	434	Brown-LT
	435	Brown-VY LT
	437	Tan-LT
	451	Shell Gray-DK
	452	Shell Gray-MD
	453	Shell Gray-LT
	522	Fern Green
	523	Fern Green-LT
	543	Beige Brown-UL VY LT
	610	Drab Brown-DK
	611	Drab Brown
	612	Drab Brown-LT
	613	Drab Brown-VY LT
	632	Desert Sand-UL VY DK
	642	Beige Gray-DK
	644	Beige Gray-MD
	645	Beaver Gray-VY DK
	646	Beaver Gray-DK
	647	Beaver Gray-MD
	648	Beaver Gray-LT
	680	Old Gold-DK
	712	Cream
	738	Tan-VY LT
	739	Tan-UL VY LT
	746	Off White
	758	Terra Cotta-VY LT
	762	Pearl Gray-VY LT
	775	Baby Blue-VY LT
	822	Beige Gray-LT
	823	Navy Blue-DK
	828	Blue-UL VY LT
	829	Golden Olive-VY DK
	831	Golden Olive-MD
	839	Beige Brown-DK
	840	Beige Brown-MD
	841	Beige Brown-LT
	842	Beige Brown-VY LT
	844	Beaver Brown-UL DK
	869	Hazelnut Brown-VY DK

	898	Coffee Brown-VY DK
	926	Gray Green-MD
	927	Gray Green-LT
	928	Gray Green-VY LT
	931	Antique Blue-MD
	932	Antique Blue-LT
	934	Black Avocado Green
	935	Avocado Green-DK
	938	Coffee Brown-UL DK
	945	Tawny
	948	Peach-VY LT
	950	Desert Sand-LT
	951	Tawny-LT
	977	Golden Brown-LT
	3021	Brown Gray-VY DK
	3022	Brown Gray-MD
	3023	Brown Gray-LT
	3024	Brown Gray-VY LT
	3031	Mocha Brown-VY DK
	3045	Yellow Beige-DK
	3047	Yellow Beige-LT
	3072	Beaver Gray-VY LT
	3078	Golden Yellow-VY LT
	3341	Apricot
	3371	Black Brown
	3747	Blue Violet-VY LT
	3752	Antique Blue-VY LT
	3756	Baby Blue-UL VY LT
	3768	Gray Green-DK
	3770	Tawny-VY LT
	3774	Desert Sand-VY LT
	3781	Mocha Brown-DK
	3782	Mocha Brown-LT
	3787	Brown Gray-DK
	3799	Pewter Gray-VY DK
	3823	Yellow-UL Pale
	3827	Golden Brown-Pale
	3828	Hazelnut Brown
	3829	Old Gold-VY DK
	3854	Autumn Gold-MD
	3855	Autumn Gold-LT
	3856	Mahogany-UL VY LT
	3860	Cocoa
	3861	Cocoa-LT
	3862	Mocha Beige-DK
	3863	Mocha Beige-MD
	3864	Mocha Beige-LT
	3865	Winter White
	3866	Mocha Brown-UL VY LT
	Ecru	Ecru

Blend Stitches. Use one strand of each of DMC1 and DMC2 for these stitches.

Symbol	DMC1	Name1	DMC2	Name2
	648	Beaver Gray-LT	452	Shell Gray-MD
	503	Blue Green-MD	414	Steel Gray-DK
	3768	Gray Green-DK	317	Pewter Gray
	535	Ash Gray-VY LT	645	Beaver Gray-VY DK
	413	Pewter Gray-DK	924	Gray Green-VY DK
	642	Beige Gray-DK	3022	Brown Gray-MD
	610	Drab Brown-DK	839	Beige Brown-DK
	645	Beaver Gray-VY DK	646	Beaver Gray-DK
	3828	Hazelnut Brown	3859	Rosewood-LT
	3860	Cocoa	451	Shell Gray-DK
	503	Blue Green-MD	451	Shell Gray-DK
	372	Mustard-LT	642	Beige Gray-DK
	738	Tan-VY LT	3864	Mocha Beige-LT
	951	Tawny-LT	754	Peach-LT
	3756	Baby Blue-UL VY LT	3865	Winter White
	1	White 1	3865	Winter White
	927	Gray Green-LT	928	Gray Green-VY LT
	317	Pewter Gray	926	Gray Green-MD
	926	Gray Green-MD	645	Beaver Gray-VY DK
	829	Golden Olive-VY DK	869	Hazelnut Brown-VY DK
	3790	Beige Gray-UL DK	640	Beige Gray-VY DK
	829	Golden Olive-VY DK	3862	Mocha Beige-DK
	647	Beaver Gray-MD	503	Blue Green-MD
	3861	Cocoa-LT	927	Gray Green-LT
	3861	Cocoa-LT	646	Beaver Gray-DK
	3790	Beige Gray-UL DK	3787	Brown Gray-DK
	640	Beige Gray-VY DK	647	Beaver Gray-MD
	936	Avocado Green-VY DK	829	Golden Olive-VY DK
	898	Coffee Brown-VY DK	3781	Mocha Brown-DK
	3855	Autumn Gold-LT	3856	Mahogany-UL VY LT
	436	Tan	734	Olive Green-LT
	434	Brown-LT	732	Olive Green
	646	Beaver Gray-DK	3021	Brown Gray-VY DK
	936	Avocado Green-VY DK	3031	Mocha Brown-VY DK
	420	Hazelnut Brown-DK	632	Desert Sand-UL VY DK
	645	Beaver Gray-VY DK	3022	Brown Gray-MD
	3023	Brown Gray-LT	524	Fern Green-VY LT
	644	Beige Gray-MD	524	Fern Green-VY LT
	3862	Mocha Beige-DK	611	Drab Brown
	3823	Yellow-UL Pale	822	Beige Gray-LT
	613	Drab Brown-VY LT	369	Pistachio Green-VY LT
	3047	Yellow Beige-LT	543	Beige Brown-UL VY LT
	644	Beige Gray-MD	3864	Mocha Beige-LT
	613	Drab Brown-VY LT	543	Beige Brown-UL VY LT
	3052	Green Gray-MD	612	Drab Brown-LT
	3053	Green Gray	841	Beige Brown-LT
	644	Beige Gray-MD	3782	Mocha Brown-LT
	372	Mustard-LT	524	Fern Green-VY LT
	644	Beige Gray-MD	738	Tan-VY LT
	712	Cream	746	Off White
	613	Drab Brown-VY LT	644	Beige Gray-MD
	829	Golden Olive-VY DK	898	Coffee Brown-VY DK
	433	Brown-MD	938	Coffee Brown-UL DK

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☐	3790	Beige Gray-UL DK	646	Beaver Gray-DK
⚡	452	Shell Gray-MD	524	Fern Green-VY LT
▲	524	Fern Green-VY LT	648	Beaver Gray-LT
⚙	524	Fern Green-VY LT	642	Beige Gray-DK
//	524	Fern Green-VY LT	369	Pistachio Green-VY LT
▲	3012	Khaki Green-MD	420	Hazelnut Brown-DK
«	420	Hazelnut Brown-DK	370	Mustard-MD
⌘	840	Beige Brown-MD	3052	Green Gray-MD
⌘	3787	Brown Gray-DK	640	Beige Gray-VY DK
▲	844	Beaver Brown-UL DK	3787	Brown Gray-DK
☼	840	Beige Brown-MD	612	Drab Brown-LT
⌘	840	Beige Brown-MD	3022	Brown Gray-MD
⌘	793	Cornflower Blue-MD	932	Antique Blue-LT
⊕	3849	Teal Green-LT	414	Steel Gray-DK
⊕	928	Gray Green-VY LT	932	Antique Blue-LT
⊕	844	Beaver Brown-UL DK	3799	Pewter Gray-VY DK
▲	610	Drab Brown-DK	632	Desert Sand-UL VY DK
)	3033	Mocha Brown-VY LT	712	Cream
▲	3022	Brown Gray-MD	3052	Green Gray-MD
⌘	739	Tan-UL VY LT	613	Drab Brown-VY LT
◇	3047	Yellow Beige-LT	613	Drab Brown-VY LT
▷	828	Blue-UL VY LT	3747	Blue Violet-VY LT
6	746	Off White	3770	Tawny-VY LT
♦♦	646	Beaver Gray-DK	647	Beaver Gray-MD
⊗	3828	Hazelnut Brown	435	Brown-VY LT
⊗	3064	Desert Sand	372	Mustard-LT
▲	370	Mustard-MD	3772	Desert Sand-VY DK
	436	Tan	356	Terra Cotta-MD
m	437	Tan-LT	3064	Desert Sand
⊕	356	Terra Cotta-MD	3863	Mocha Beige-MD
⊕	372	Mustard-LT	422	Hazelnut Brown-LT
↔	945	Tawny	738	Tan-VY LT
⌘	3861	Cocoa-LT	3023	Brown Gray-LT
L	3854	Autumn Gold-MD	3855	Autumn Gold-LT
□	3778	Terra Cotta-LT	3827	Golden Brown-Pale
z	3778	Terra Cotta-LT	436	Tan
↓	436	Tan	3854	Autumn Gold-MD
↺	3855	Autumn Gold-LT	945	Tawny
g	3047	Yellow Beige-LT	3823	Yellow-UL Pale
~	945	Tawny	3078	Golden Yellow-VY LT
⊕	3860	Cocoa	840	Beige Brown-MD
⌘	3862	Mocha Beige-DK	3772	Desert Sand-VY DK
⊕	632	Desert Sand-UL VY DK	435	Brown-VY LT
⌘	841	Beige Brown-LT	3859	Rosewood-LT
⌘	831	Golden Olive-MD	3829	Old Gold-VY DK
↑	3024	Brown Gray-VY LT	928	Gray Green-VY LT
⊕	3863	Mocha Beige-MD	632	Desert Sand-UL VY DK
⌘	435	Brown-VY LT	3863	Mocha Beige-MD

This table specifies how much thread of each color is required to stitch this pattern. It is good to know that one complete DMC skein contains 313 inches (795 cm) thread.

DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		14		16		18	
1	White 1	411	161	391	153	352	138
310	Black	6692	2634	6373	2509	5736	2258
317	Pewter Gray	158	62	151	59	136	53
318	Steel Gray-LT	125	49	119	46	107	42
341	Blue Violet-LT	180	70	172	67	154	60
356	Terra Cotta-MD	338	133	322	126	289	113
369	Pistachio Green-VY LT	612	240	582	229	524	206
370	Mustard-MD	1321	520	1258	495	1133	446
371	Mustard	540	212	514	202	463	182
372	Mustard-LT	4110	1618	3914	1540	3523	1387
413	Pewter Gray -DK	272	107	259	101	233	91
414	Steel Gray-DK	283	111	269	105	242	95
420	Hazelnut Brown-DK	1200	472	1142	449	1028	404
422	Hazelnut Brown-LT	213	83	202	79	182	71
433	Brown-MD	879	346	837	329	753	296
434	Brown-LT	1417	557	1349	531	1214	477
435	Brown-VY LT	527	207	502	197	452	177
436	Tan	523	205	498	196	448	176
437	Tan-LT	496	195	472	185	425	167
451	Shell Gray-DK	1304	513	1242	488	1118	440
452	Shell Gray-MD	2227	876	2121	835	1909	751
453	Shell Gray-LT	995	391	948	373	853	335
503	Blue Green-MD	996	392	949	373	854	336
522	Fern Green	56	22	54	21	48	18
523	Fern Green-LT	220	86	209	82	188	74
524	Fern Green-VY LT	8225	3238	7833	3083	7050	2775
535	Ash Gray-VY LT	237	93	225	88	203	79
543	Beige Brown-UL VY LT	4292	1689	4088	1609	3679	1448
610	Drab Brown-DK	2638	1038	2513	989	2261	890
611	Drab Brown	1062	418	1011	398	910	358
612	Drab Brown-LT	2984	1174	2842	1118	2558	1007
613	Drab Brown-VY LT	4909	1932	4675	1840	4207	1656
632	Desert Sand-UL VY DK	1369	538	1304	513	1173	461
640	Beige Gray-VY DK	3167	1246	3016	1187	2715	1068
642	Beige Gray-DK	7462	2937	7106	2797	6396	2518
644	Beige Gray-MD	6456	2541	6148	2420	5534	2178
645	Beaver Gray-VY DK	2654	1044	2528	995	2275	895
646	Beaver Gray-DK	4990	1964	4753	1871	4277	1683
647	Beaver Gray-MD	6812	2681	6488	2554	5839	2298
648	Beaver Gray-LT	3742	1473	3564	1403	3207	1262
680	Old Gold-DK	65	25	62	24	55	21
712	Cream	3432	1351	3269	1287	2942	1158
732	Olive Green	694	273	661	260	595	234
734	Olive Green-LT	190	74	181	71	163	64
738	Tan-VY LT	2166	852	2063	812	1856	730
739	Tan-UL VY LT	888	349	845	332	761	299
746	Off White	3545	1395	3376	1329	3038	1196
754	Peach-LT	139	54	133	52	119	46
758	Terra Cotta-VY LT	186	73	177	69	160	62
762	Pearl Gray-VY LT	127	50	121	47	109	42
775	Baby Blue-VY LT	175	68	167	65	150	59
793	Cornflower Blue-MD	103	40	99	38	89	35
822	Beige Gray-LT	4444	1749	4232	1666	3809	1499
823	Navy Blue-DK	72	28	69	27	62	24

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828	Blue-UL VY LT	304	119	289	113	260	102
829	Golden Olive-VY DK	3807	1498	3626	1427	3263	1284
831	Golden Olive-MD	384	151	366	144	329	129
839	Beige Brown-DK	1899	747	1808	711	1627	640
840	Beige Brown-MD	4796	1888	4567	1798	4110	1618
841	Beige Brown-LT	2395	942	2281	898	2053	808
842	Beige Brown-VY LT	700	275	667	262	600	236
844	Beaver Brown-UL DK	2085	820	1985	781	1787	703
869	Hazelnut Brown-VY DK	2360	929	2247	884	2023	796
898	Coffee Brown-VY DK	1667	656	1587	624	1428	562
924	Gray Green-VY DK	73	28	69	27	62	24
926	Gray Green-MD	391	153	373	146	335	131
927	Gray Green-LT	2677	1053	2549	1003	2294	903
928	Gray Green-VY LT	2549	1003	2427	955	2184	859
931	Antique Blue-MD	90	35	86	33	77	30
932	Antique Blue-LT	527	207	502	197	452	177
934	Black Avocado Green	234	92	223	87	201	79
935	Avocado Green-DK	112	44	107	42	96	37
936	Avocado Green-VY DK	365	143	348	137	313	123
938	Coffee Brown-UL DK	1508	593	1436	565	1292	508
945	Tawny	730	287	695	273	625	246
948	Peach-VY LT	258	101	246	96	221	87
950	Desert Sand-LT	372	146	354	139	319	125
951	Tawny-LT	392	154	373	146	336	132
977	Golden Brown-LT	71	27	68	26	61	24
3012	Khaki Green-MD	165	64	157	61	141	55
3021	Brown Gray-VY DK	1543	607	1470	578	1323	520
3022	Brown Gray-MD	5772	2272	5497	2164	4947	1947
3023	Brown Gray-LT	5952	2343	5669	2231	5102	2008
3024	Brown Gray-VY LT	2250	885	2143	843	1928	759
3031	Mocha Brown-VY DK	960	377	914	359	823	324
3033	Mocha Brown-VY LT	1667	656	1588	625	1429	562
3045	Yellow Beige-DK	877	345	835	328	752	296
3047	Yellow Beige-LT	2135	840	2034	800	1830	720
3052	Green Gray-MD	3116	1226	2968	1168	2671	1051
3053	Green Gray	1218	479	1160	456	1044	411
3064	Desert Sand	621	244	591	232	532	209
3072	Beaver Gray-VY LT	1034	407	985	387	887	349
3078	Golden Yellow-VY LT	236	92	225	88	202	79
3341	Apricot	90	35	86	33	77	30
3371	Black Brown	408	160	388	152	350	137
3747	Blue Violet-VY LT	297	116	283	111	254	100
3752	Antique Blue-VY LT	566	222	539	212	485	190
3756	Baby Blue-UL VY LT	474	186	451	177	406	159
3768	Gray Green-DK	216	85	206	81	185	72
3770	Tawny-VY LT	1504	592	1433	564	1289	507
3772	Desert Sand-VY DK	595	234	567	223	510	200
3774	Desert Sand-VY LT	210	82	200	78	180	70
3778	Terra Cotta-LT	216	85	205	80	185	72
3781	Mocha Brown-DK	1798	707	1713	674	1541	606
3782	Mocha Brown-LT	2477	975	2359	928	2123	835
3787	Brown Gray-DK	5645	2222	5376	2116	4838	1904
3790	Beige Gray-UL DK	2973	1170	2831	1114	2548	1003
3799	Pewter Gray-VY DK	354	139	337	132	303	119
3823	Yellow-UL Pale	3030	1192	2885	1135	2597	1022
3827	Golden Brown-Pale	247	97	235	92	211	83
3828	Hazelnut Brown	1345	529	1281	504	1153	453
3829	Old Gold-VY DK	203	79	193	75	174	68
3849	Teal Green-LT	135	53	129	50	116	45

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3854	Autumn Gold-MD	233	91	222	87	200	78
3855	Autumn Gold-LT	451	177	429	168	386	151
3856	Mahogany-UL VY LT	209	82	199	78	179	70
3859	Rosewood-LT	382	150	364	143	327	128
3860	Cocoa	871	342	829	326	746	293
3861	Cocoa-LT	2017	794	1920	755	1728	680
3862	Mocha Beige-DK	2510	988	2391	941	2152	847
3863	Mocha Beige-MD	1710	673	1629	641	1466	577
3864	Mocha Beige-LT	1758	692	1674	659	1507	593
3865	Winter White	1596	628	1520	598	1368	538
3866	Mocha Brown-UL VY LT	1224	481	1166	459	1049	412
Ecru	Ecru	4162	1638	3964	1560	3568	1404

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		10		12		24	
1	White 1	634	248	528	207	264	104
310	Black	10325	4064	8604	3387	4302	1694
317	Pewter Gray	245	95	204	80	102	40
318	Steel Gray-LT	193	76	161	63	80	32
341	Blue Violet-LT	277	108	231	90	116	45
356	Terra Cotta-MD	520	203	434	170	217	85
369	Pistachio Green-VY LT	943	371	786	309	393	155
370	Mustard-MD	2039	803	1700	669	850	335
371	Mustard	833	328	695	273	347	137
372	Mustard-LT	6341	2497	5285	2081	2642	1040
413	Pewter Gray -DK	419	164	350	137	175	68
414	Steel Gray-DK	436	171	363	143	182	71
420	Hazelnut Brown-DK	1850	727	1542	606	771	303
422	Hazelnut Brown-LT	328	128	273	107	137	53
433	Brown-MD	1355	533	1130	444	565	222
434	Brown-LT	2185	859	1821	716	911	358
435	Brown-VY LT	814	319	678	266	339	133
436	Tan	806	317	672	264	336	132
437	Tan-LT	765	301	638	251	319	125
451	Shell Gray-DK	2012	792	1677	660	839	330
452	Shell Gray-MD	3436	1352	2864	1127	1432	563
453	Shell Gray-LT	1535	603	1280	503	640	251
503	Blue Green-MD	1537	605	1281	504	641	252
522	Fern Green	86	32	72	27	36	14
523	Fern Green-LT	338	133	282	111	141	56
524	Fern Green-VY LT	12690	4995	10575	4163	5288	2081
535	Ash Gray -VY LT	365	142	305	119	152	59
543	Beige Brown-UL VY LT	6622	2606	5519	2172	2759	1086
610	Drab Brown-DK	4070	1602	3392	1335	1696	668
611	Drab Brown	1638	644	1365	537	683	269
612	Drab Brown-LT	4604	1813	3837	1511	1919	755
613	Drab Brown-VY LT	7573	2981	6311	2484	3155	1242
632	Desert Sand-UL VY DK	2111	830	1760	692	880	346
640	Beige Gray-VY DK	4887	1922	4073	1602	2036	801
642	Beige Gray-DK	11513	4532	9594	3777	4797	1889
644	Beige Gray-MD	9961	3920	8301	3267	4151	1634
645	Beaver Gray-VY DK	4095	1611	3413	1343	1706	671
646	Beaver Gray-DK	7699	3029	6416	2525	3208	1262
647	Beaver Gray-MD	10510	4136	8759	3447	4379	1724
648	Beaver Gray-LT	5773	2272	4811	1893	2405	947

680	Old Gold-DK	99	38	83	32	41	16
712	Cream	5296	2084	4413	1737	2207	869
732	Olive Green	1071	421	893	351	446	176
734	Olive Green-LT	293	115	245	96	122	48
738	Tan-VY LT	3341	1314	2784	1095	1392	548
739	Tan-UL VY LT	1370	538	1142	449	571	224
746	Off White	5468	2153	4557	1794	2279	897
754	Peach-LT	214	83	179	69	89	35
758	Terra Cotta-VY LT	288	112	240	93	120	47
762	Pearl Gray-VY LT	196	76	164	63	82	32
775	Baby Blue-VY LT	270	106	225	89	113	44
793	Cornflower Blue-MD	160	63	134	53	67	26
822	Beige Gray-LT	6856	2698	5714	2249	2857	1124
823	Navy Blue-DK	112	43	93	36	47	18
828	Blue-UL VY LT	468	184	390	153	195	77
829	Golden Olive-VY DK	5873	2311	4895	1926	2447	963
831	Golden Olive-MD	592	232	494	194	247	97
839	Beige Brown-DK	2929	1152	2441	960	1220	480
840	Beige Brown-MD	7398	2912	6165	2427	3083	1214
841	Beige Brown-LT	3695	1454	3080	1212	1540	606
842	Beige Brown-VY LT	1080	425	900	354	450	177
844	Beaver Brown-UL DK	3217	1265	2681	1055	1340	527
869	Hazelnut Brown-VY DK	3641	1433	3035	1194	1517	597
898	Coffee Brown-VY DK	2570	1012	2142	843	1071	422
924	Gray Green-VY DK	112	43	93	36	47	18
926	Gray Green-MD	603	236	503	197	251	98
927	Gray Green-LT	4129	1625	3441	1355	1721	677
928	Gray Green-VY LT	3931	1546	3276	1289	1638	644
931	Antique Blue-MD	139	54	116	45	58	23
932	Antique Blue-LT	814	319	678	266	339	133
934	Black Avocado Green	362	142	302	119	151	59
935	Avocado Green-DK	173	67	144	56	72	28
936	Avocado Green-VY DK	563	221	470	185	235	92
938	Coffee Brown-UL DK	2326	914	1938	762	969	381
945	Tawny	1125	443	938	369	469	185
948	Peach-VY LT	398	157	332	131	166	65
950	Desert Sand-LT	574	225	479	188	239	94
951	Tawny -LT	605	238	504	198	252	99
977	Golden Brown-LT	110	43	92	36	46	18
3012	Khaki Green-MD	254	99	212	83	106	41
3021	Brown Gray -VY DK	2381	936	1985	780	992	390
3022	Brown Gray -MD	8905	3505	7421	2921	3710	1460
3023	Brown Gray -LT	9184	3614	7653	3012	3827	1506
3024	Brown Gray -VY LT	3470	1366	2892	1139	1446	569
3031	Mocha Brown-VY DK	1481	583	1235	486	617	243
3033	Mocha Brown-VY LT	2572	1012	2144	843	1072	422
3045	Yellow Beige-DK	1354	533	1128	444	564	222
3047	Yellow Beige-LT	3294	1296	2745	1080	1373	540
3052	Green Gray-MD	4808	1892	4007	1577	2003	788
3053	Green Gray	1879	740	1566	617	783	308
3064	Desert Sand	958	376	798	314	399	157
3072	Beaver Gray-VY LT	1597	628	1331	524	665	262
3078	Golden Yellow -VY LT	364	142	303	119	152	59
3341	Apricot	139	54	116	45	58	23
3371	Black Brown	630	247	525	206	263	103
3747	Blue Violet-VY LT	457	180	381	150	191	75
3752	Antique Blue-VY LT	873	342	728	285	364	143
3756	Baby Blue-UL VY LT	731	286	609	239	305	119
3768	Gray Green-DK	333	130	278	108	139	54

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3770	Tawny-VY LT	2320	913	1934	761	967	380
3772	Desert Sand-VY DK	918	360	765	300	383	150
3774	Desert Sand-VY LT	324	126	270	105	135	53
3778	Terra Cotta-LT	333	130	278	108	139	54
3781	Mocha Brown-DK	2774	1091	2312	909	1156	455
3782	Mocha Brown-LT	3821	1503	3185	1253	1592	626
3787	Brown Gray -DK	8708	3427	7257	2856	3629	1428
3790	Beige Gray-UL DK	4586	1805	3822	1505	1911	752
3799	Pewter Gray-VY DK	545	214	455	179	227	89
3823	Yellow-UL Pale	4675	1840	3896	1533	1948	767
3827	Golden Brown-Pale	380	149	317	125	158	62
3828	Hazelnut Brown	2075	815	1730	680	865	340
3829	Old Gold-VY DK	313	122	261	102	131	51
3849	Teal Green-LT	209	81	174	68	87	34
3854	Autumn Gold-MD	360	140	300	117	150	59
3855	Autumn Gold-LT	695	272	579	227	290	113
3856	Mahogany-UL VY LT	322	126	269	105	134	53
3859	Rosewood-LT	589	230	491	192	245	96
3860	Cocoa	1343	527	1119	440	560	220
3861	Cocoa-LT	3110	1224	2592	1020	1296	510
3862	Mocha Beige-DK	3874	1525	3228	1271	1614	635
3863	Mocha Beige-MD	2639	1039	2199	866	1100	433
3864	Mocha Beige-LT	2713	1067	2261	890	1130	445
3865	Winter White	2462	968	2052	807	1026	404
3866	Mocha Brown-UL VY LT	1888	742	1574	618	787	309
Ecru	Ecru	6422	2527	5352	2106	2676	1053

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		25		26		27	
1	White 1	253	99	244	96	235	92
310	Black	4130	1626	3971	1563	3824	1505
317	Pewter Gray	98	38	94	37	91	35
318	Steel Gray-LT	77	30	74	29	71	28
341	Blue Violet-LT	111	43	107	42	103	40
356	Terra Cotta-MD	208	81	200	78	193	75
369	Pistachio Green-VY LT	377	148	363	143	349	137
370	Mustard-MD	816	321	784	309	755	297
371	Mustard	333	131	321	126	309	121
372	Mustard-LT	2537	999	2439	960	2349	925
413	Pewter Gray -DK	168	66	161	63	155	61
414	Steel Gray -DK	174	68	168	66	161	63
420	Hazelnut Brown-DK	740	291	712	280	685	269
422	Hazelnut Brown-LT	131	51	126	49	121	47
433	Brown-MD	542	213	521	205	502	197
434	Brown-LT	874	343	840	330	809	318
435	Brown-VY LT	325	127	313	123	301	118
436	Tan	323	127	310	122	299	117
437	Tan-LT	306	120	294	116	283	111
451	Shell Gray-DK	805	317	774	305	745	293
452	Shell Gray-MD	1374	541	1322	520	1273	501
453	Shell Gray-LT	614	241	591	232	569	223
503	Blue Green-MD	615	242	591	233	569	224
522	Fern Green	35	13	33	12	32	12
523	Fern Green-LT	135	53	130	51	125	49
524	Fern Green-VY LT	5076	1998	4881	1921	4700	1850

535	Ash Gray-VY LT	146	57	141	55	135	53
543	Beige Brown-UL VY LT	2649	1043	2547	1002	2453	965
610	Drab Brown-DK	1628	641	1565	616	1507	593
611	Drab Brown	655	258	630	248	607	239
612	Drab Brown-LT	1842	725	1771	697	1705	671
613	Drab Brown-VY LT	3029	1192	2913	1146	2805	1104
632	Desert Sand-UL VY DK	845	332	812	319	782	307
640	Beige Gray-VY DK	1955	769	1880	739	1810	712
642	Beige Gray-DK	4605	1813	4428	1743	4264	1679
644	Beige Gray-MD	3984	1568	3831	1508	3689	1452
645	Beaver Gray-VY DK	1638	644	1575	620	1517	597
646	Beaver Gray-DK	3079	1212	2961	1165	2851	1122
647	Beaver Gray-MD	4204	1655	4042	1591	3893	1532
648	Beaver Gray-LT	2309	909	2220	874	2138	841
680	Old Gold-DK	40	15	38	15	37	14
712	Cream	2118	834	2037	802	1961	772
732	Olive Green	428	168	412	162	397	156
734	Olive Green-LT	117	46	113	44	109	43
738	Tan-VY LT	1336	526	1285	505	1237	487
739	Tan-UL VY LT	548	215	527	207	507	199
746	Off White	2187	861	2103	828	2025	797
754	Peach-LT	86	33	82	32	79	31
758	Terra Cotta-VY LT	115	45	111	43	107	41
762	Pearl Gray-VY LT	78	30	75	29	73	28
775	Baby Blue-VY LT	108	42	104	41	100	39
793	Cornflower Blue-MD	64	25	62	24	59	23
822	Beige Gray-LT	2742	1079	2637	1038	2539	999
823	Navy Blue-DK	45	17	43	17	41	16
828	Blue-UL VY LT	187	73	180	71	173	68
829	Golden Olive-VY DK	2349	924	2259	889	2175	856
831	Golden Olive-MD	237	93	228	89	219	86
839	Beige Brown-DK	1171	461	1126	443	1085	427
840	Beige Brown-MD	2959	1165	2845	1120	2740	1079
841	Beige Brown-LT	1478	582	1421	559	1369	539
842	Beige Brown-VY LT	432	170	415	163	400	157
844	Beaver Brown-UL DK	1287	506	1237	487	1191	469
869	Hazelnut Brown-VY DK	1457	573	1401	551	1349	531
898	Coffee Brown-VY DK	1028	405	989	389	952	375
924	Gray Green-VY DK	45	17	43	17	41	16
926	Gray Green-MD	241	94	232	91	223	87
927	Gray Green-LT	1652	650	1588	625	1529	602
928	Gray Green-VY LT	1572	618	1512	595	1456	573
931	Antique Blue-MD	55	22	53	21	51	20
932	Antique Blue-LT	325	127	313	123	301	118
934	Black Avocado Green	145	57	139	55	134	53
935	Avocado Green-DK	69	27	66	26	64	25
936	Avocado Green-VY DK	225	89	217	85	209	82
938	Coffee Brown-UL DK	930	366	894	352	861	339
945	Tawny	450	177	433	170	417	164
948	Peach-VY LT	159	63	153	60	147	58
950	Desert Sand-LT	230	90	221	87	213	83
951	Tawny-LT	242	95	233	91	224	88
977	Golden Brown-LT	44	17	42	17	41	16
3012	Khaki Green-MD	102	40	98	38	94	37
3021	Brown Gray-VY DK	953	374	916	360	882	347
3022	Brown Gray-MD	3562	1402	3425	1348	3298	1298
3023	Brown Gray-LT	3673	1446	3532	1390	3401	1339
3024	Brown Gray-VY LT	1388	546	1335	525	1285	506
3031	Mocha Brown-VY DK	593	233	570	224	549	216

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3033	Mocha Brown-VY LT	1029	405	989	389	953	375
3045	Yellow Beige-DK	541	213	521	205	501	197
3047	Yellow Beige-LT	1318	518	1267	498	1220	480
3052	Green Gray-MD	1923	757	1849	728	1781	701
3053	Green Gray	752	296	723	285	696	274
3064	Desert Sand	383	150	368	145	355	139
3072	Beaver Gray-VY LT	639	251	614	242	591	233
3078	Golden Yellow -VY LT	145	57	140	55	135	53
3341	Apricot	55	22	53	21	51	20
3371	Black Brown	252	99	242	95	233	91
3747	Blue Violet-VY LT	183	72	176	69	169	67
3752	Antique Blue-VY LT	349	137	336	132	323	127
3756	Baby Blue-UL VY LT	292	114	281	110	271	106
3768	Gray Green-DK	133	52	128	50	123	48
3770	Tawny -VY LT	928	365	892	351	859	338
3772	Desert Sand-VY DK	367	144	353	138	340	133
3774	Desert Sand-VY LT	130	50	125	48	120	47
3778	Terra Cotta-LT	133	52	128	50	123	48
3781	Mocha Brown-DK	1110	436	1067	420	1027	404
3782	Mocha Brown-LT	1529	601	1470	578	1415	557
3787	Brown Gray -DK	3483	1371	3349	1318	3225	1269
3790	Beige Gray-UL DK	1835	722	1764	694	1699	669
3799	Pewter Gray -VY DK	218	86	210	82	202	79
3823	Yellow-UL Pale	1870	736	1798	708	1731	681
3827	Golden BrownPale	152	60	146	57	141	55
3828	Hazelnut Brown	830	326	798	314	769	302
3829	Old Gold-VY DK	125	49	120	47	116	45
3849	Teal Green-LT	84	32	80	31	77	30
3854	Autumn Gold-MD	144	56	138	54	133	52
3855	Autumn Gold-LT	278	109	267	105	257	101
3856	Mahogany-UL VY LT	129	50	124	48	119	47
3859	Rosewood-LT	235	92	226	89	218	85
3860	Cocoa	537	211	516	203	497	195
3861	Cocoa-LT	1244	490	1196	471	1152	453
3862	Mocha Beige-DK	1549	610	1490	586	1435	565
3863	Mocha Beige-MD	1056	415	1015	399	977	385
3864	Mocha Beige-LT	1085	427	1043	411	1005	395
3865	Winter White	985	387	947	372	912	359
3866	Mocha Brown-UL VY LT	755	297	726	285	699	275
Ecru	Ecru	2569	1011	2470	972	2379	936

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		28		30		32	
1	White 1	226	89	211	83	198	78
310	Black	3687	1452	3442	1355	3227	1270
317	Pewter Gray	87	34	82	32	77	30
318	Steel Gray-LT	69	27	64	25	60	24
341	Blue Violet-LT	99	39	92	36	87	34
356	Terra Cotta-MD	186	73	173	68	163	64
369	Pistachio Green-VY LT	337	132	314	124	295	116
370	Mustard-MD	728	287	680	268	637	251
371	Mustard	298	117	278	109	260	102
372	Mustard-LT	2265	892	2114	832	1982	780
413	Pewter Gray -DK	150	59	140	55	131	51
414	Steel Gray-DK	156	61	145	57	136	53
420	Hazelnut Brown-DK	661	260	617	242	578	227

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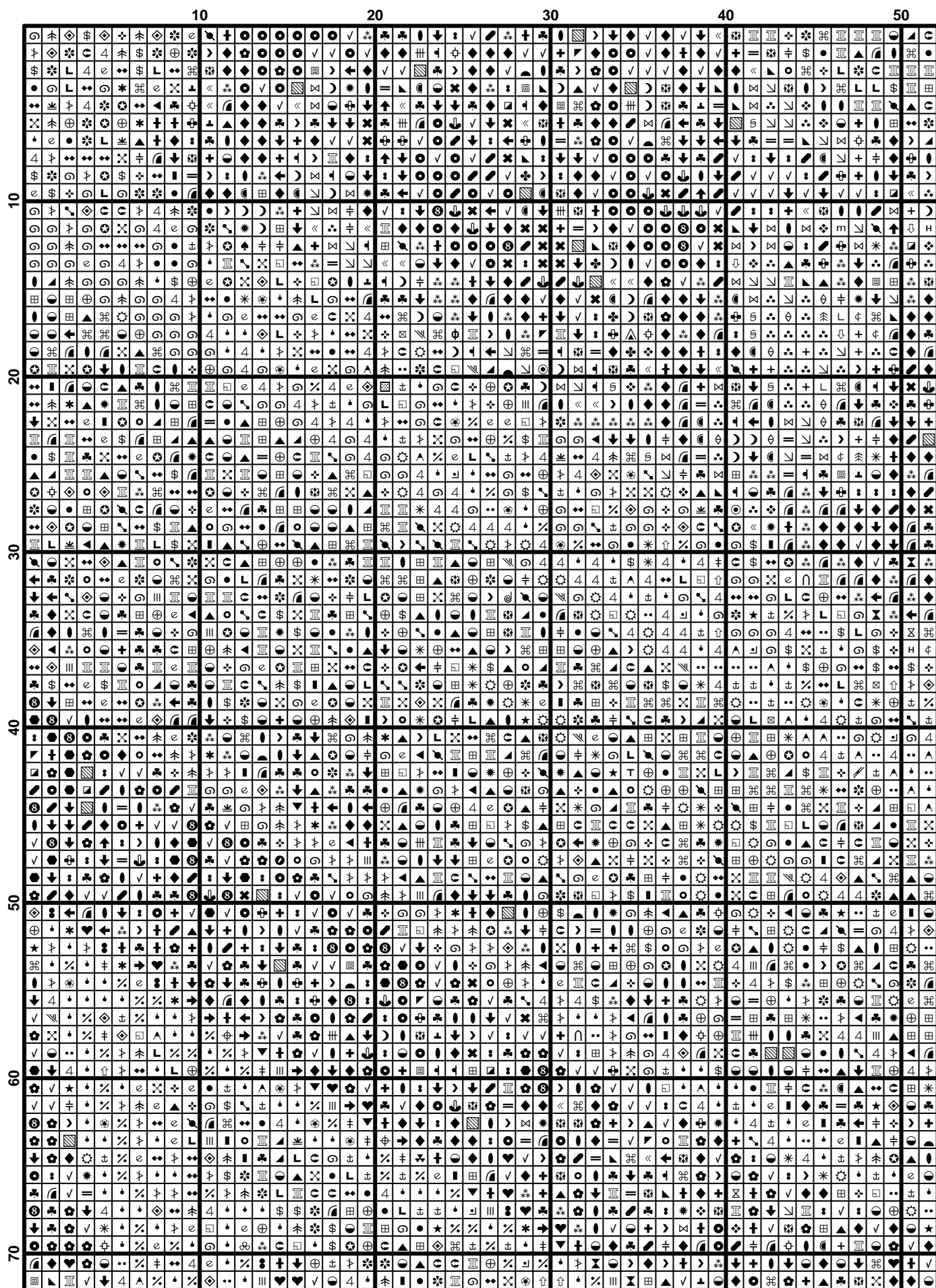
422	Hazelnut Brown-LT	117	46	109	43	102	40
433	Brown-MD	484	190	452	178	424	167
434	Brown-LT	780	307	728	286	683	268
435	Brown-VY LT	291	114	271	106	254	100
436	Tan	288	113	269	106	252	99
437	Tan-LT	273	107	255	100	239	94
451	Shell Gray-DK	719	283	671	264	629	248
452	Shell Gray-MD	1227	483	1145	451	1074	422
453	Shell Gray-LT	548	215	512	201	480	188
503	Blue Green-MD	549	216	512	202	480	189
522	Fern Green	31	12	29	11	27	10
523	Fern Green-LT	121	48	113	44	106	42
524	Fern Green-VY LT	4532	1784	4230	1665	3966	1561
535	Ash Gray -VY LT	131	51	122	47	114	44
543	Beige Brown-UL VY LT	2365	931	2207	869	2069	815
610	Drab Brown-DK	1454	572	1357	534	1272	501
611	Drab Brown	585	230	546	215	512	201
612	Drab Brown-LT	1644	647	1535	604	1439	566
613	Drab Brown-VY LT	2705	1065	2524	994	2366	932
632	Desert Sand-UL VY DK	754	296	704	277	660	259
640	Beige Gray-VY DK	1745	687	1629	641	1527	601
642	Beige Gray-DK	4112	1619	3838	1511	3598	1416
644	Beige Gray-MD	3558	1400	3320	1307	3113	1225
645	Beaver Gray-VY DK	1463	575	1365	537	1280	503
646	Beaver Gray-DK	2750	1082	2566	1010	2406	947
647	Beaver Gray-MD	3754	1477	3503	1379	3284	1293
648	Beaver Gray-LT	2062	811	1924	757	1804	710
680	Old Gold-DK	35	14	33	13	31	12
712	Cream	1891	744	1765	695	1655	651
732	Olive Green	383	150	357	140	335	132
734	Olive Green-LT	105	41	98	38	92	36
738	Tan-VY LT	1193	469	1114	438	1044	411
739	Tan-UL VY LT	489	192	457	179	428	168
746	Off White	1953	769	1823	718	1709	673
754	Peach-LT	77	30	71	28	67	26
758	Terra Cotta-VY LT	103	40	96	37	90	35
762	Pearl Gray-VY LT	70	27	65	25	61	24
775	Baby Blue-VY LT	96	38	90	35	84	33
793	Cornflower Blue-MD	57	23	53	21	50	20
822	Beige Gray-LT	2449	964	2285	899	2143	843
823	Navy Blue-DK	40	15	37	14	35	14
828	Blue-UL VY LT	167	66	156	61	146	57
829	Golden Olive-VY DK	2098	825	1958	770	1835	722
831	Golden Olive-MD	212	83	197	77	185	73
839	Beige Brown-DK	1046	411	976	384	915	360
840	Beige Brown-MD	2642	1040	2466	971	2312	910
841	Beige Brown-LT	1320	519	1232	485	1155	455
842	Beige Brown-VY LT	386	152	360	142	338	133
844	Beaver Brown-UL DK	1149	452	1072	422	1005	395
869	Hazelnut Brown-VY DK	1301	512	1214	478	1138	448
898	Coffee Brown-VY DK	918	361	857	337	803	316
924	Gray Green-VY DK	40	15	37	14	35	14
926	Gray Green-MD	215	84	201	79	188	74
927	Gray Green-LT	1475	581	1376	542	1290	508
928	Gray Green-VY LT	1404	552	1310	515	1229	483
931	Antique Blue-MD	50	19	46	18	43	17
932	Antique Blue-LT	291	114	271	106	254	100
934	Black Avocado Green	129	51	121	47	113	44
935	Avocado Green-DK	62	24	58	22	54	21

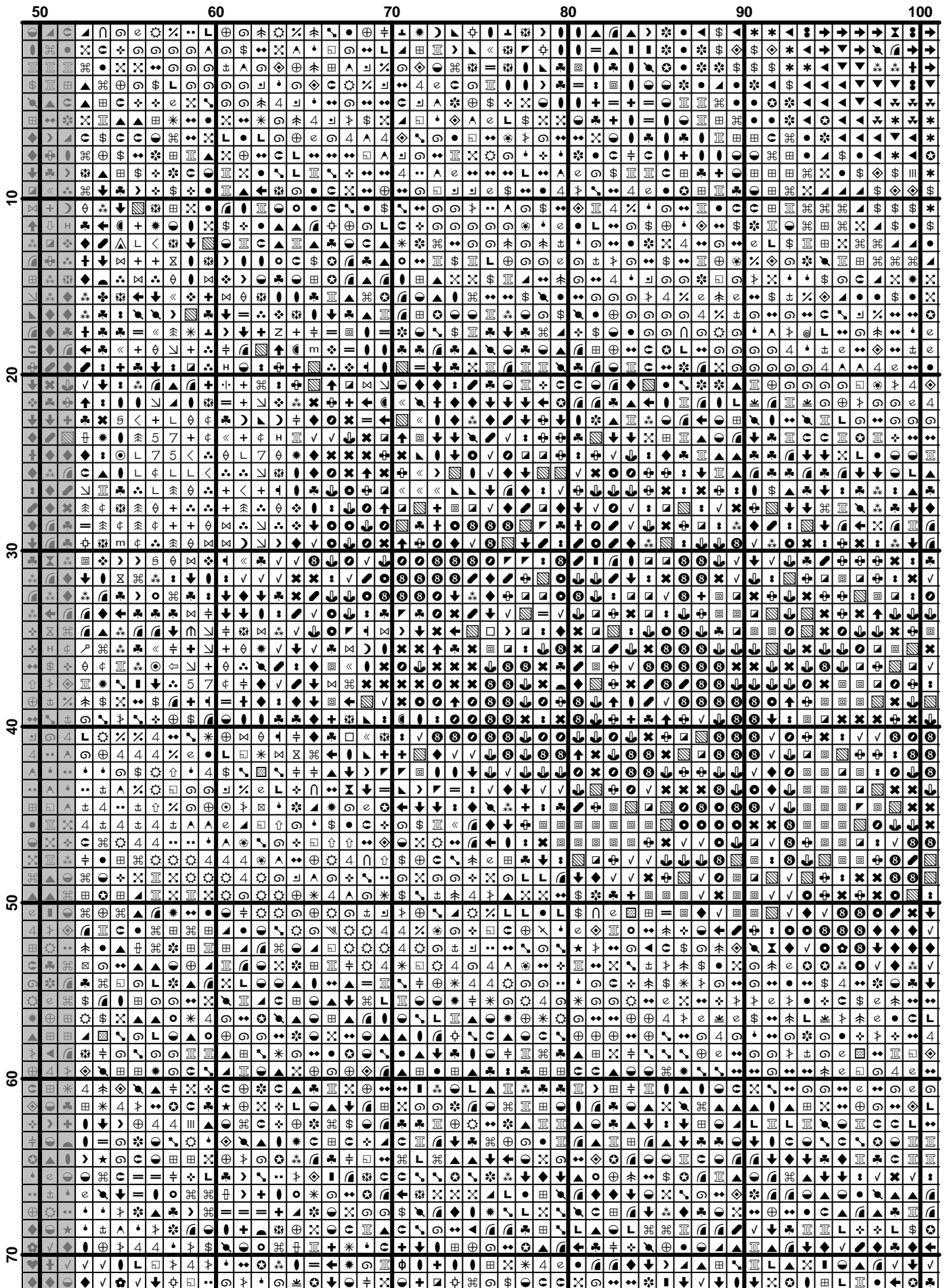
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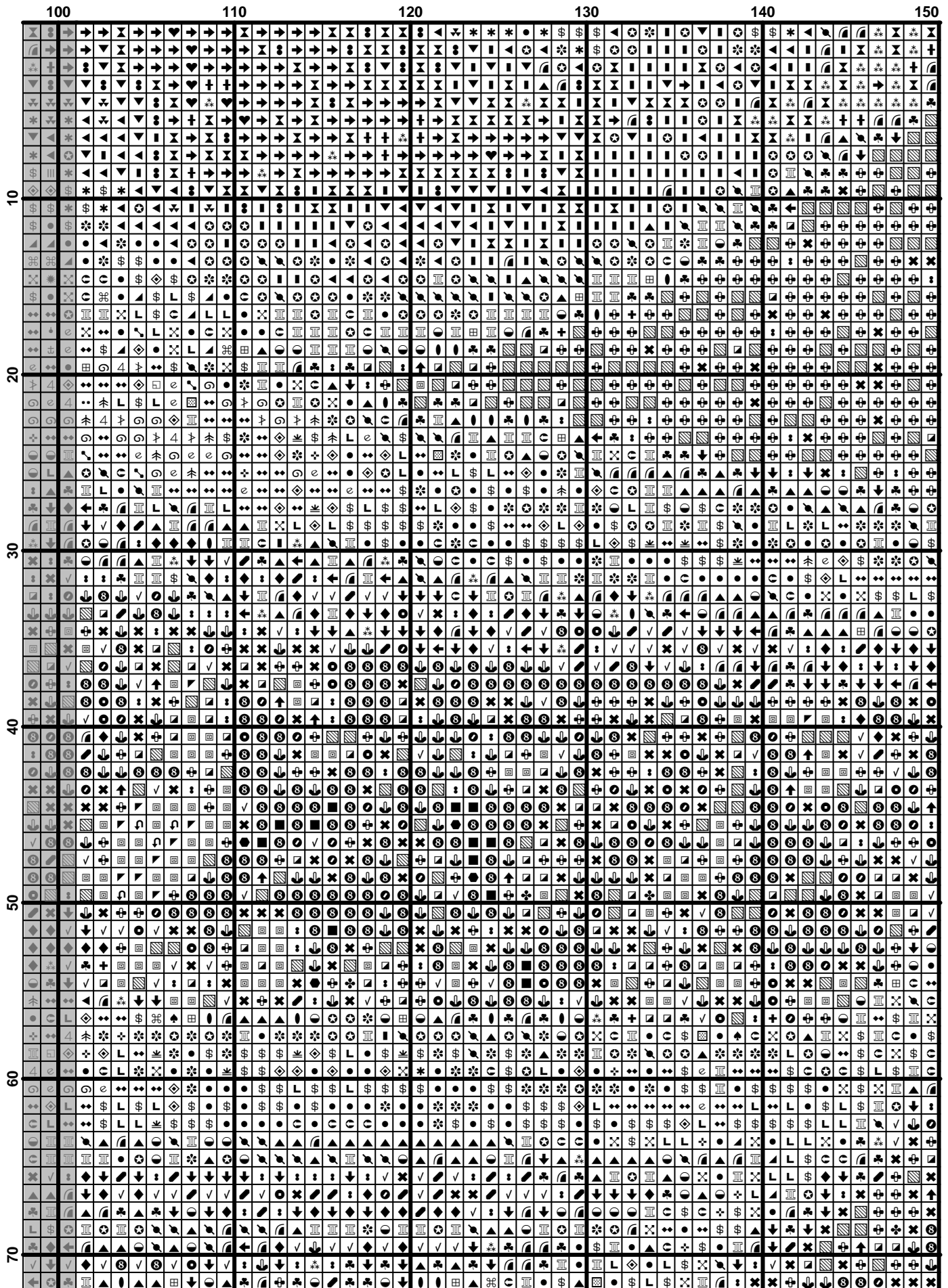
Internet: www.goldenkite.com

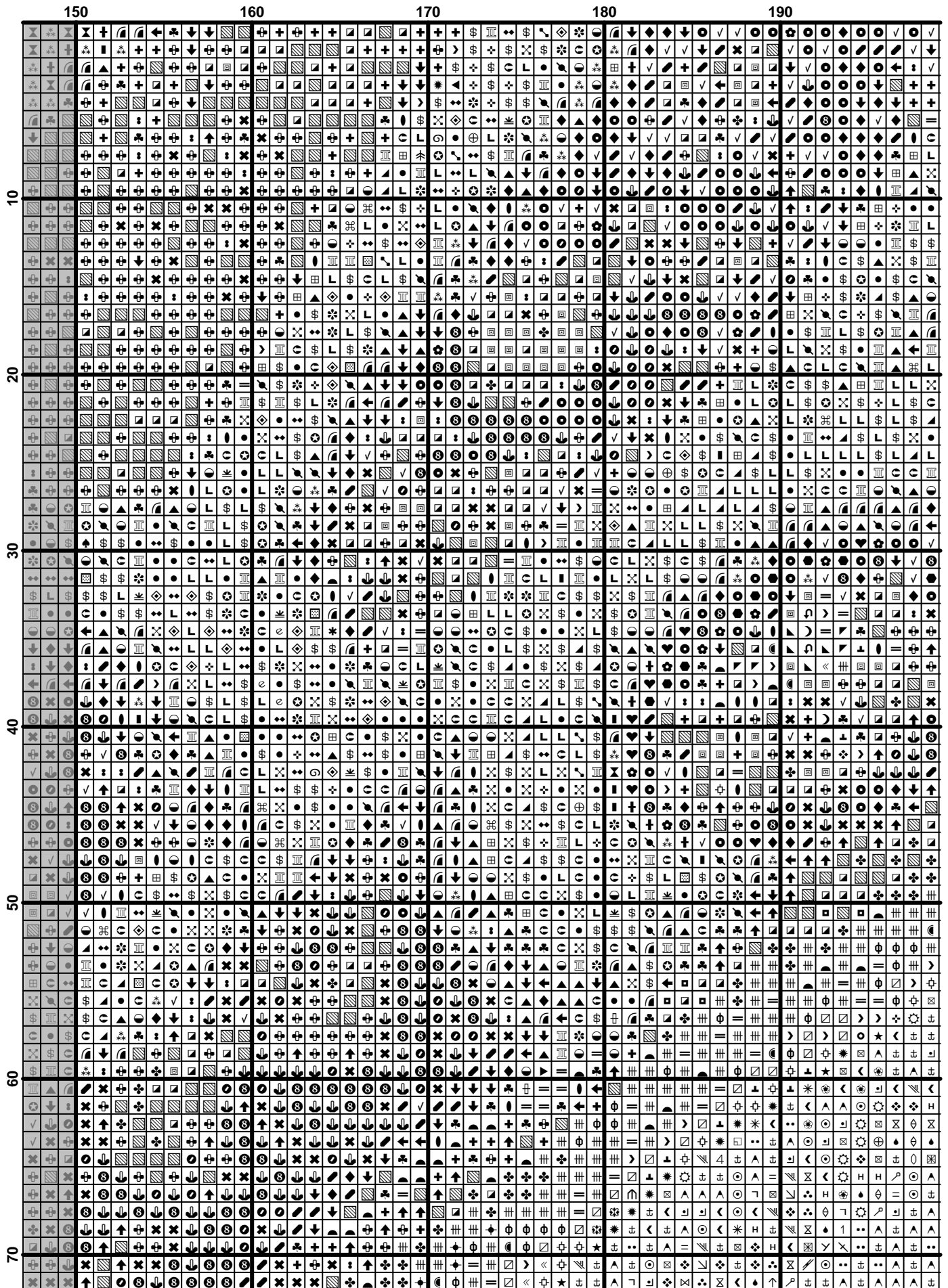
e-mail: info@goldenkite.com

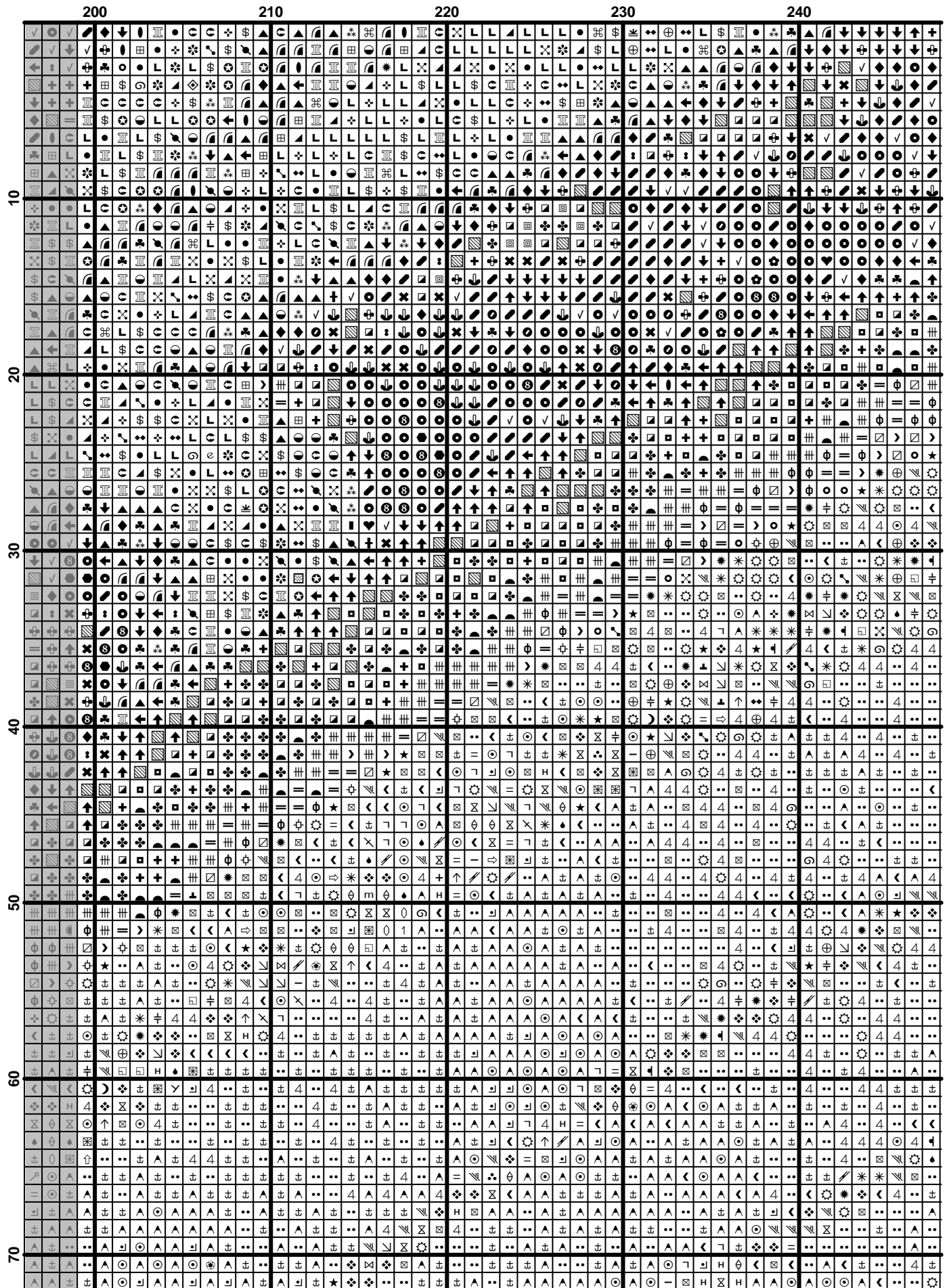
936	Avocado Green-VY DK	201	79	188	74	176	69
938	Coffee Brown-UL DK	831	327	775	305	727	286
945	Tawny	402	158	375	148	352	138
948	Peach-VY LT	142	56	133	52	124	49
950	Desert Sand-LT	205	80	191	75	179	70
951	Tawny-LT	216	85	202	79	189	74
977	Golden Brown-LT	39	15	37	14	34	14
3012	Khaki Green-MD	91	35	85	33	79	31
3021	Brown Gray-VY DK	851	334	794	312	744	293
3022	Brown Gray-MD	3180	1252	2968	1168	2783	1095
3023	Brown Gray-LT	3280	1291	3061	1205	2870	1130
3024	Brown Gray-VY LT	1239	488	1157	455	1085	427
3031	Mocha Brown-VY DK	529	208	494	194	463	182
3033	Mocha Brown-VY LT	919	361	857	337	804	316
3045	Yellow Beige-DK	483	190	451	178	423	167
3047	Yellow Beige-LT	1176	463	1098	432	1029	405
3052	Green Gray-MD	1717	676	1603	631	1502	591
3053	Green Gray	671	264	626	247	587	231
3064	Desert Sand	342	134	319	125	299	118
3072	Beaver Gray-VY LT	570	224	532	209	499	196
3078	Golden Yellow-VY LT	130	51	121	47	114	44
3341	Apricot	50	19	46	18	43	17
3371	Black Brown	225	88	210	82	197	77
3747	Blue Violet-VY LT	163	64	152	60	143	56
3752	Antique Blue-VY LT	312	122	291	114	273	107
3756	Baby Blue-UL VY LT	261	102	244	95	228	89
3768	Gray Green-DK	119	46	111	43	104	41
3770	Tawny-VY LT	829	326	773	304	725	285
3772	Desert Sand-VY DK	328	129	306	120	287	113
3774	Desert Sand-VY LT	116	45	108	42	101	39
3778	Terra Cotta-LT	119	46	111	43	104	41
3781	Mocha Brown-DK	991	390	925	364	867	341
3782	Mocha Brown-LT	1365	537	1274	501	1194	470
3787	Brown Gray-DK	3110	1224	2903	1142	2721	1071
3790	Beige Gray-UL DK	1638	645	1529	602	1433	564
3799	Pewter Gray-VY DK	195	77	182	71	170	67
3823	Yellow-UL Pale	1670	657	1558	613	1461	575
3827	Golden Brown-Pale	136	53	127	50	119	47
3828	Hazelnut Brown	741	291	692	272	649	255
3829	Old Gold-VY DK	112	44	104	41	98	38
3849	Teal Green-LT	75	29	70	27	65	25
3854	Autumn Gold-MD	129	50	120	47	113	44
3855	Autumn Gold-LT	248	97	232	91	217	85
3856	Mahogany-UL VY LT	115	45	107	42	101	39
3859	Rosewood-LT	210	82	196	77	184	72
3860	Cocoa	480	188	448	176	420	165
3861	Cocoa-LT	1111	437	1037	408	972	383
3862	Mocha Beige-DK	1383	545	1291	508	1211	476
3863	Mocha Beige-MD	942	371	880	346	825	325
3864	Mocha Beige-LT	969	381	904	356	848	334
3865	Winter White	879	346	821	323	770	303
3866	Mocha Brown-UL VY LT	674	265	629	247	590	232
Ecru	Ecru	2294	903	2141	842	2007	790

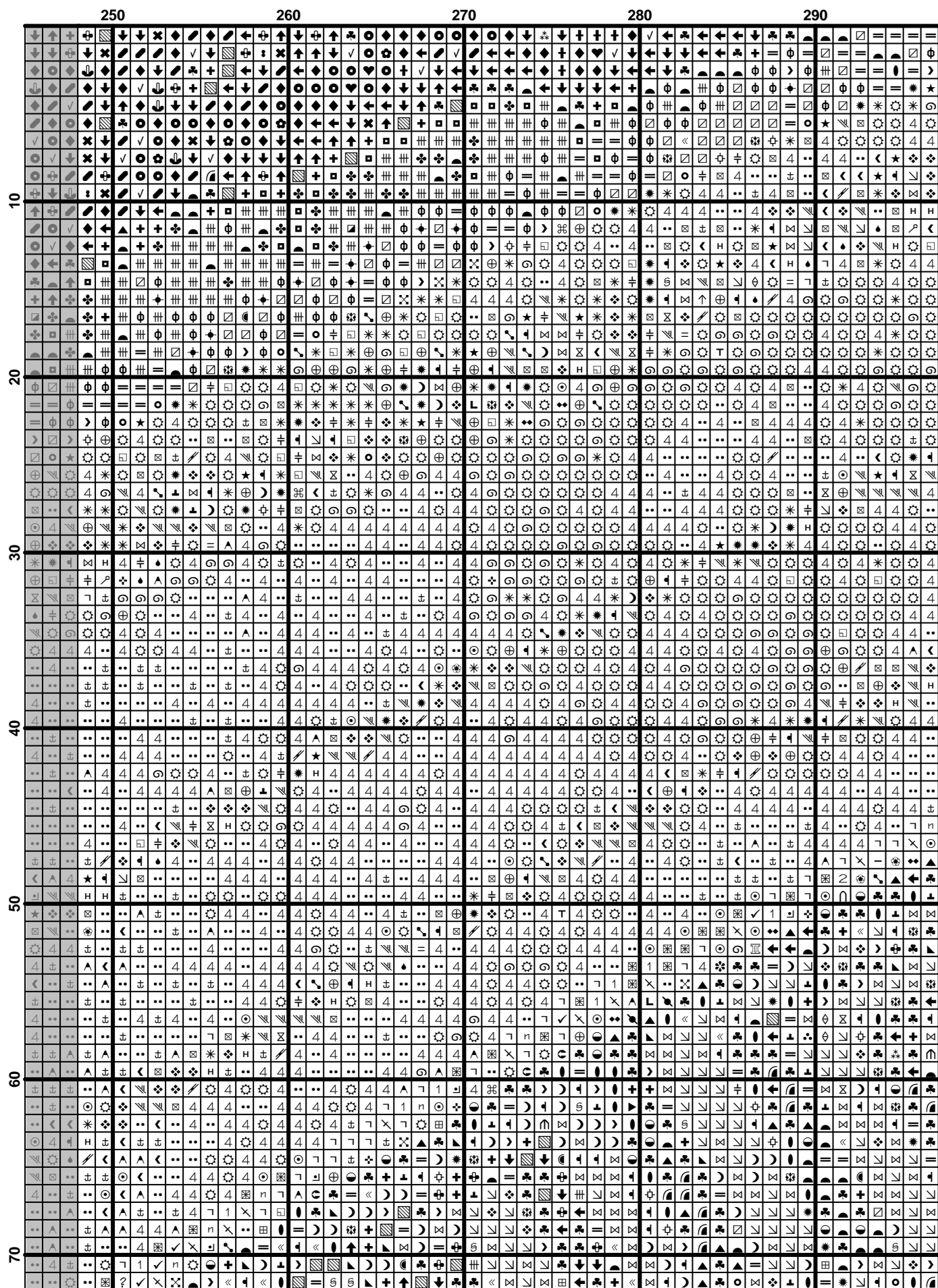


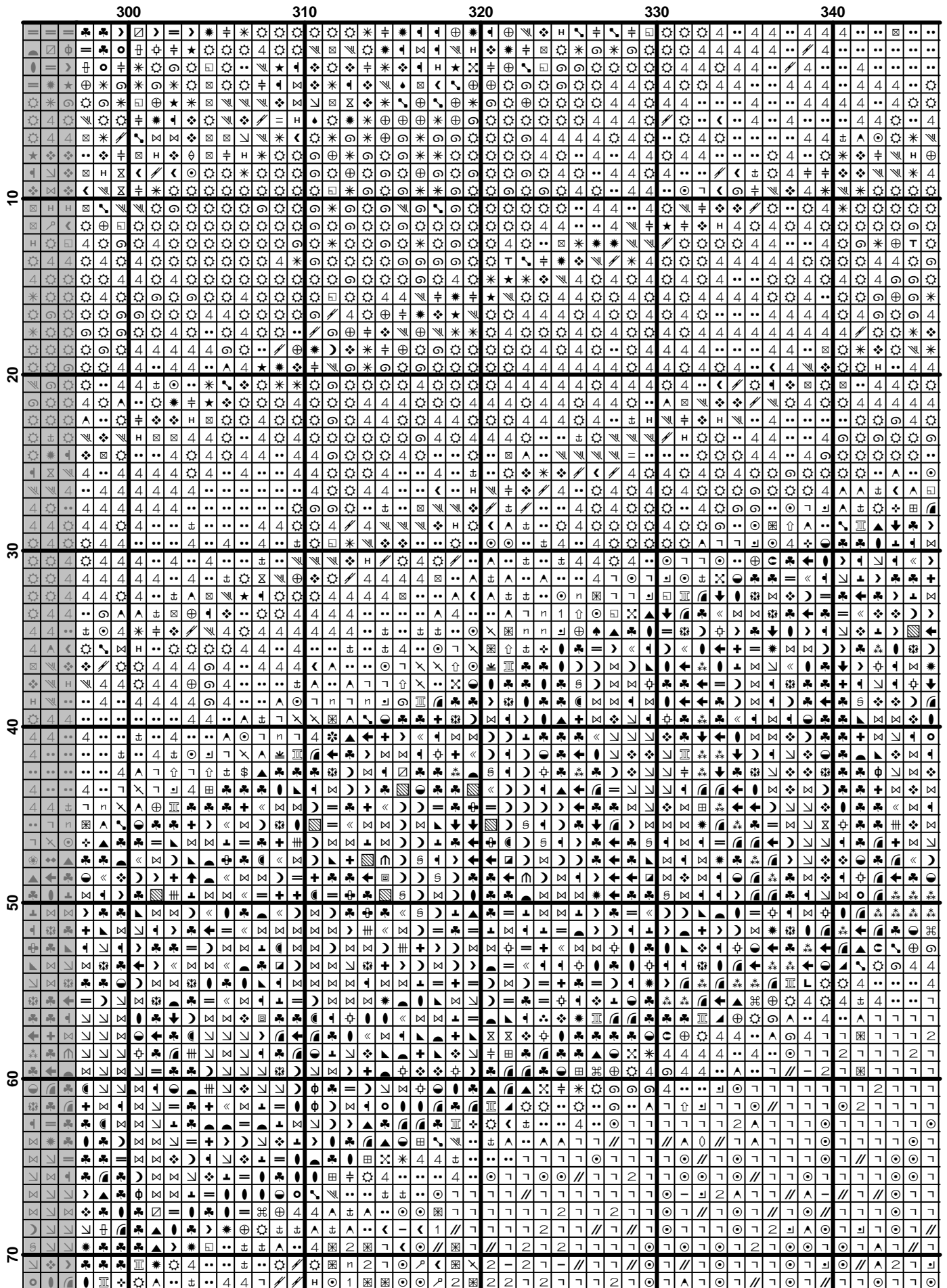


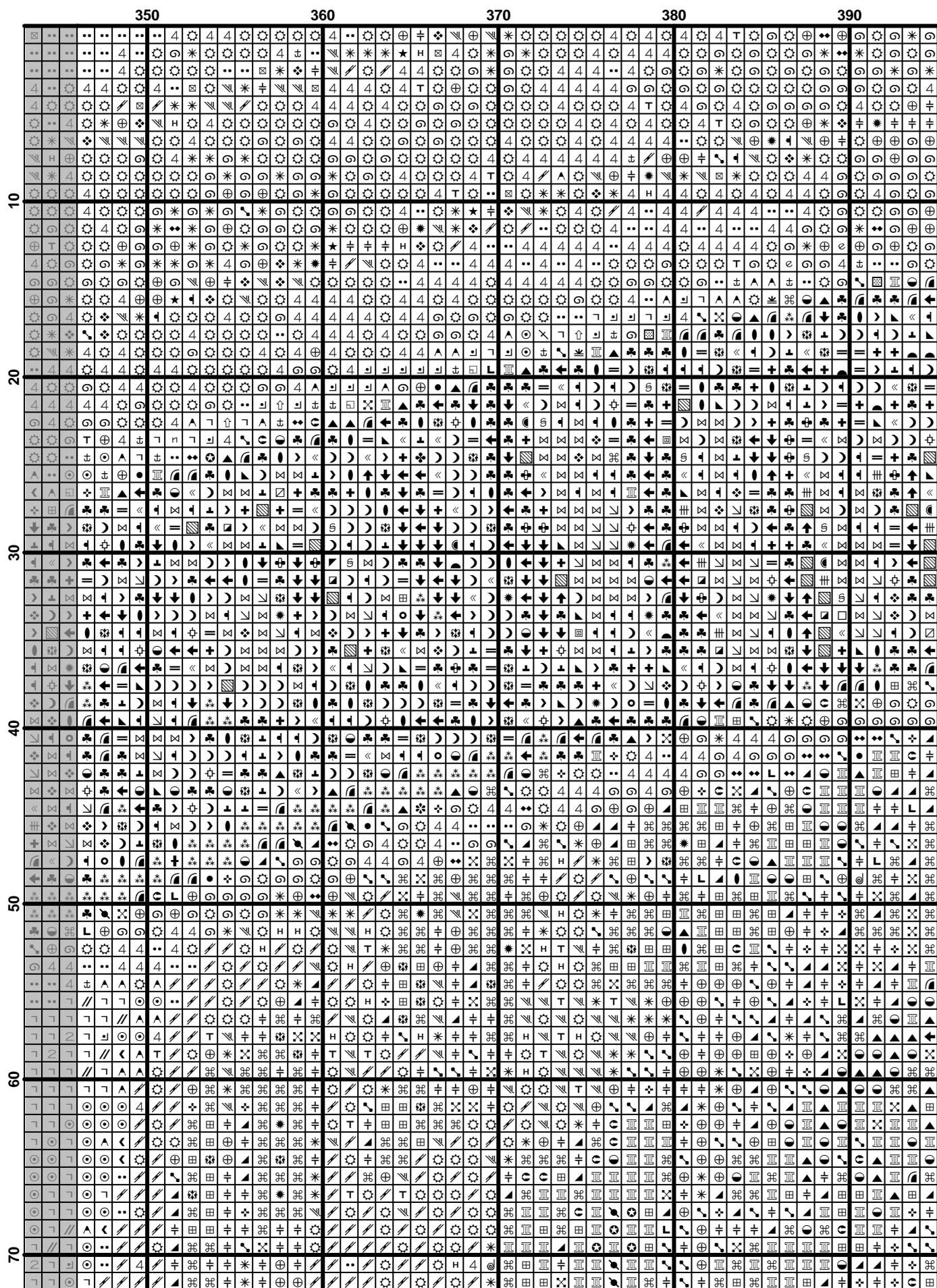


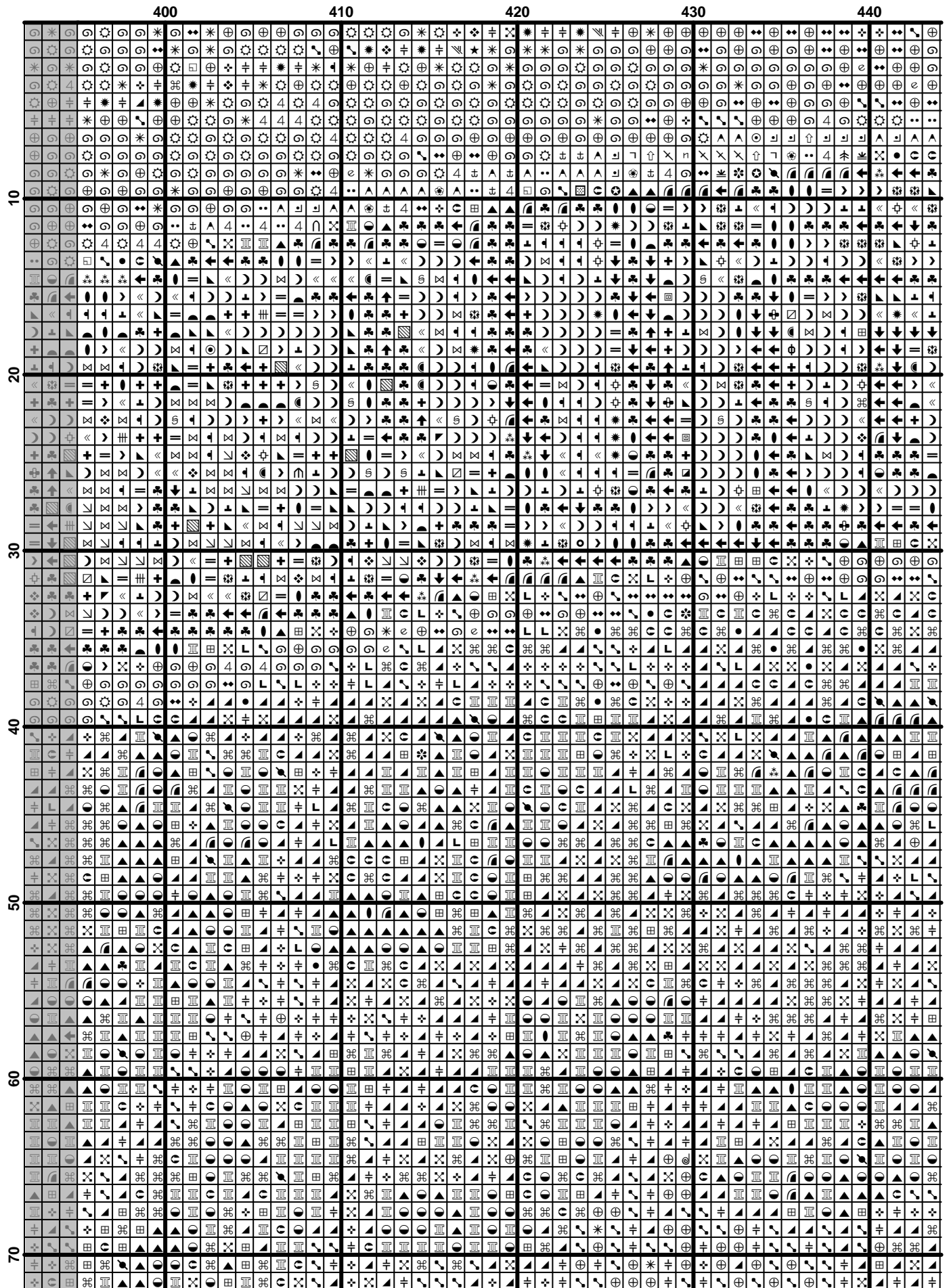


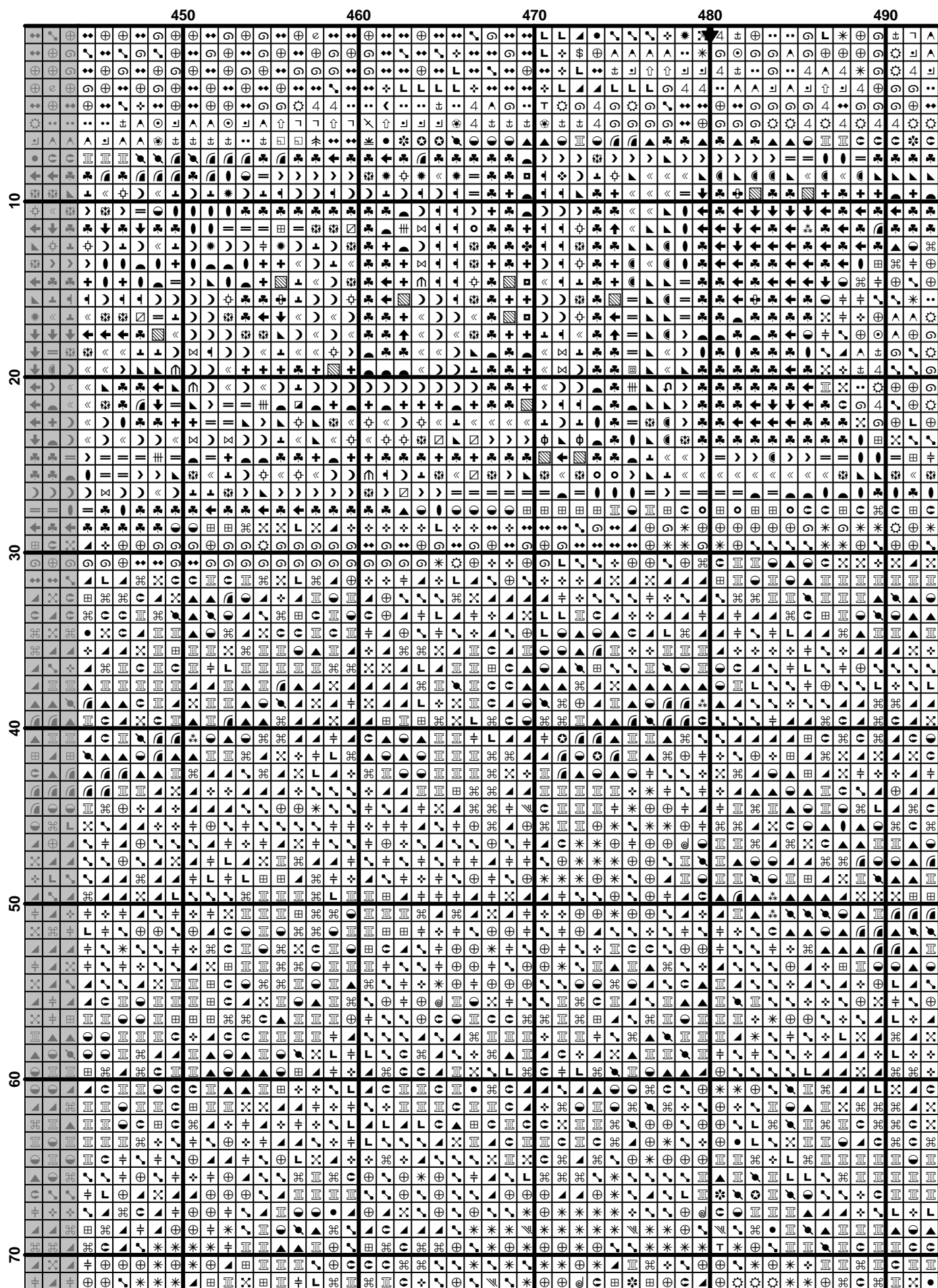


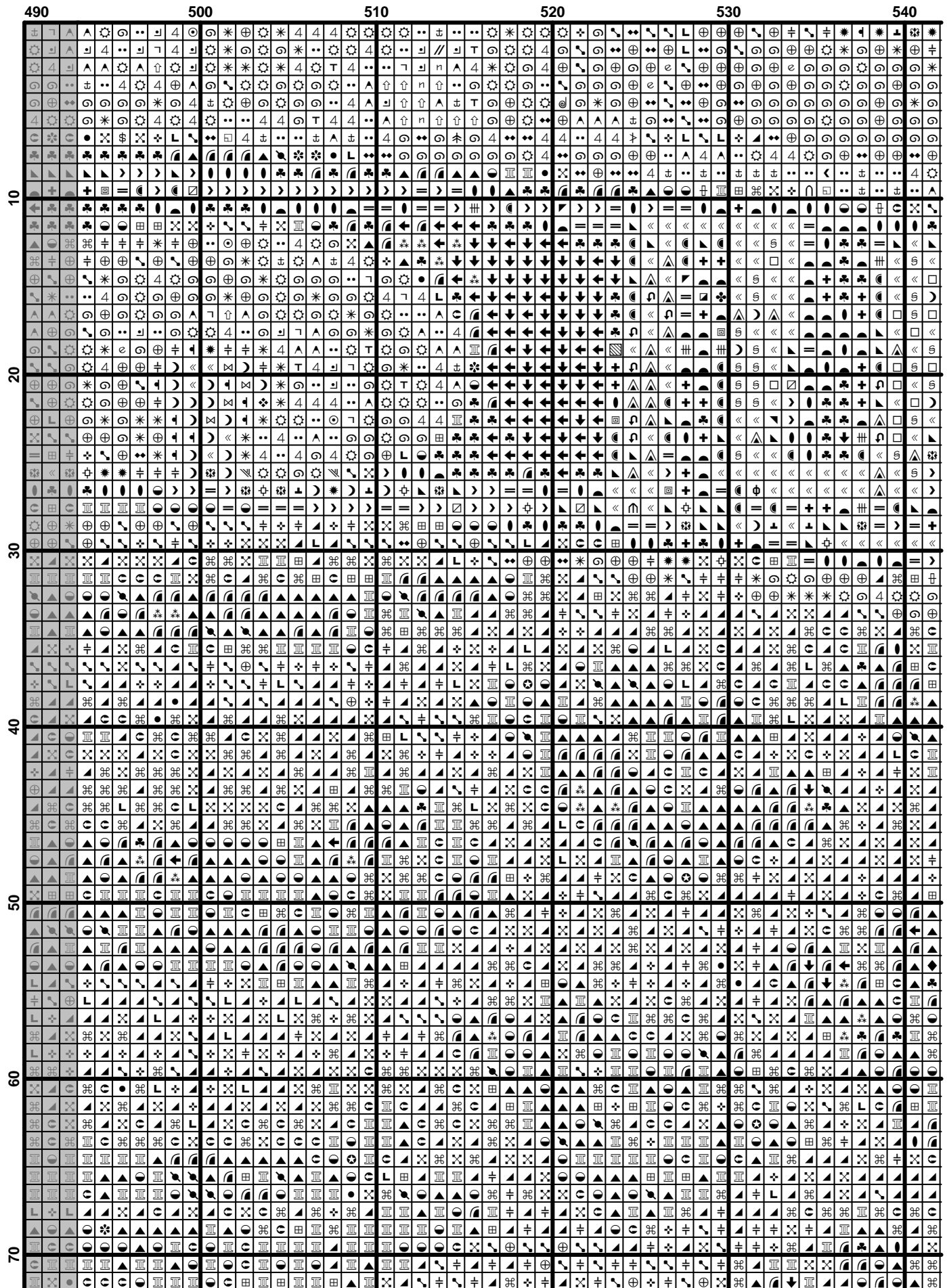


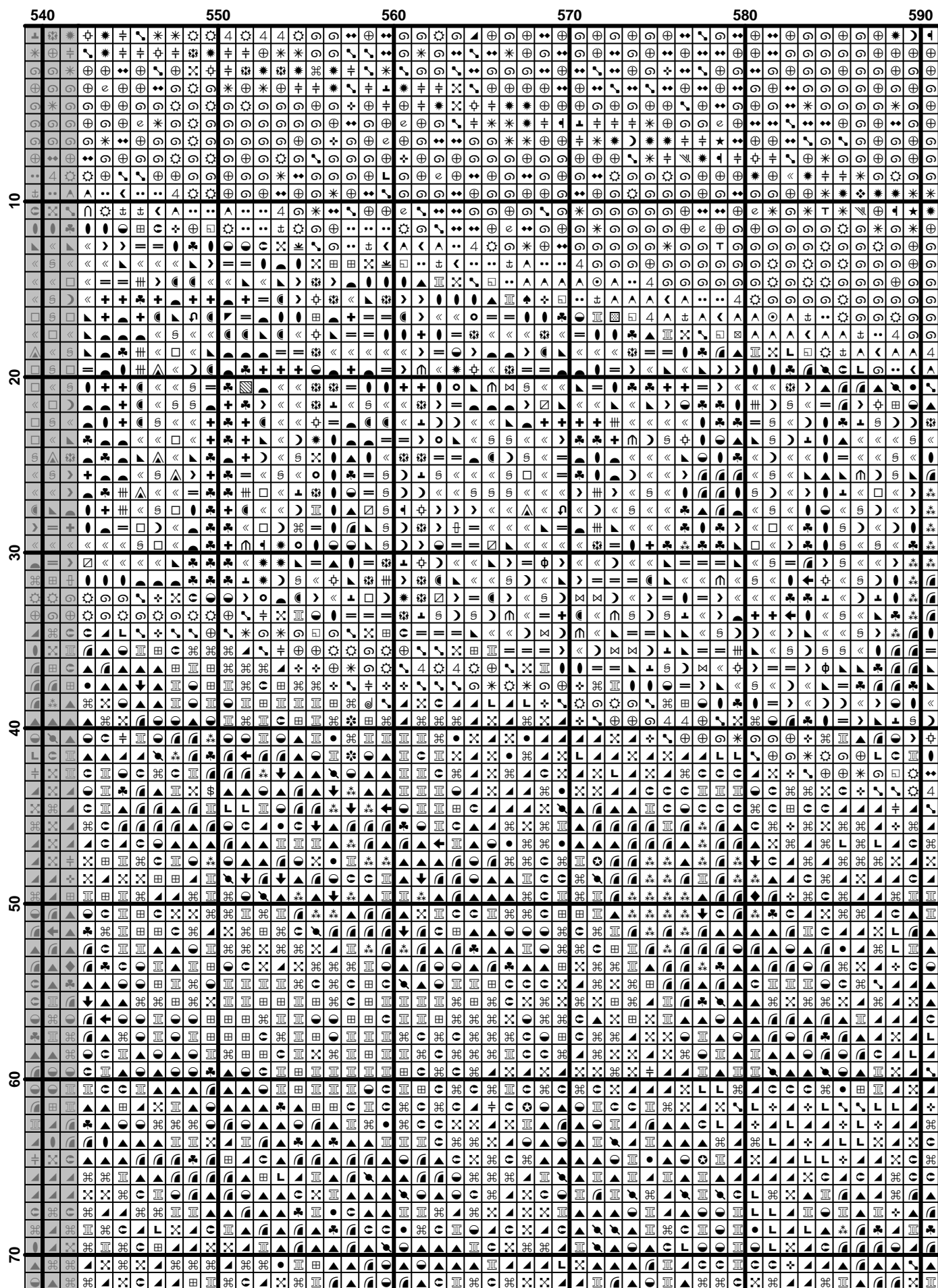


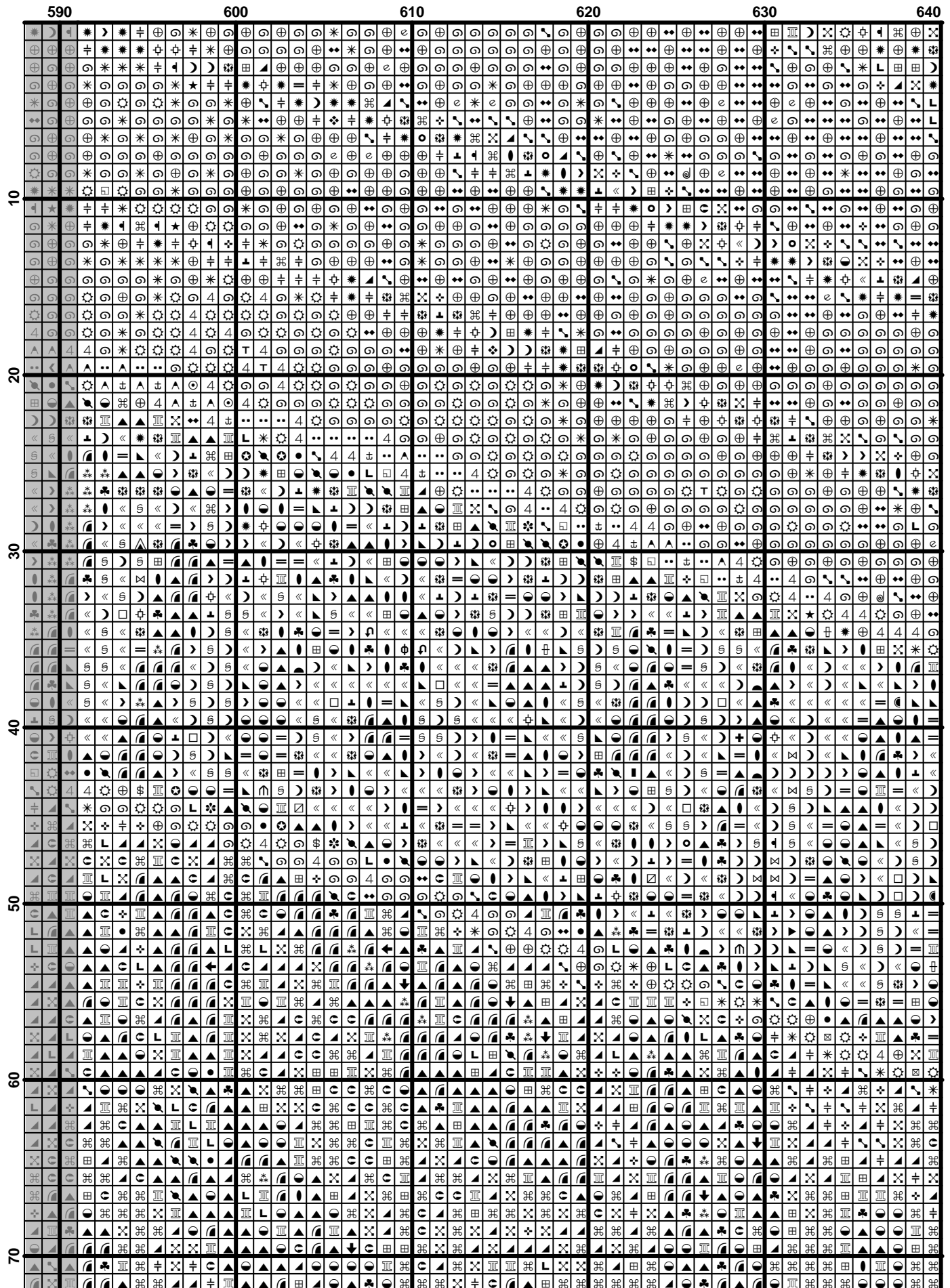


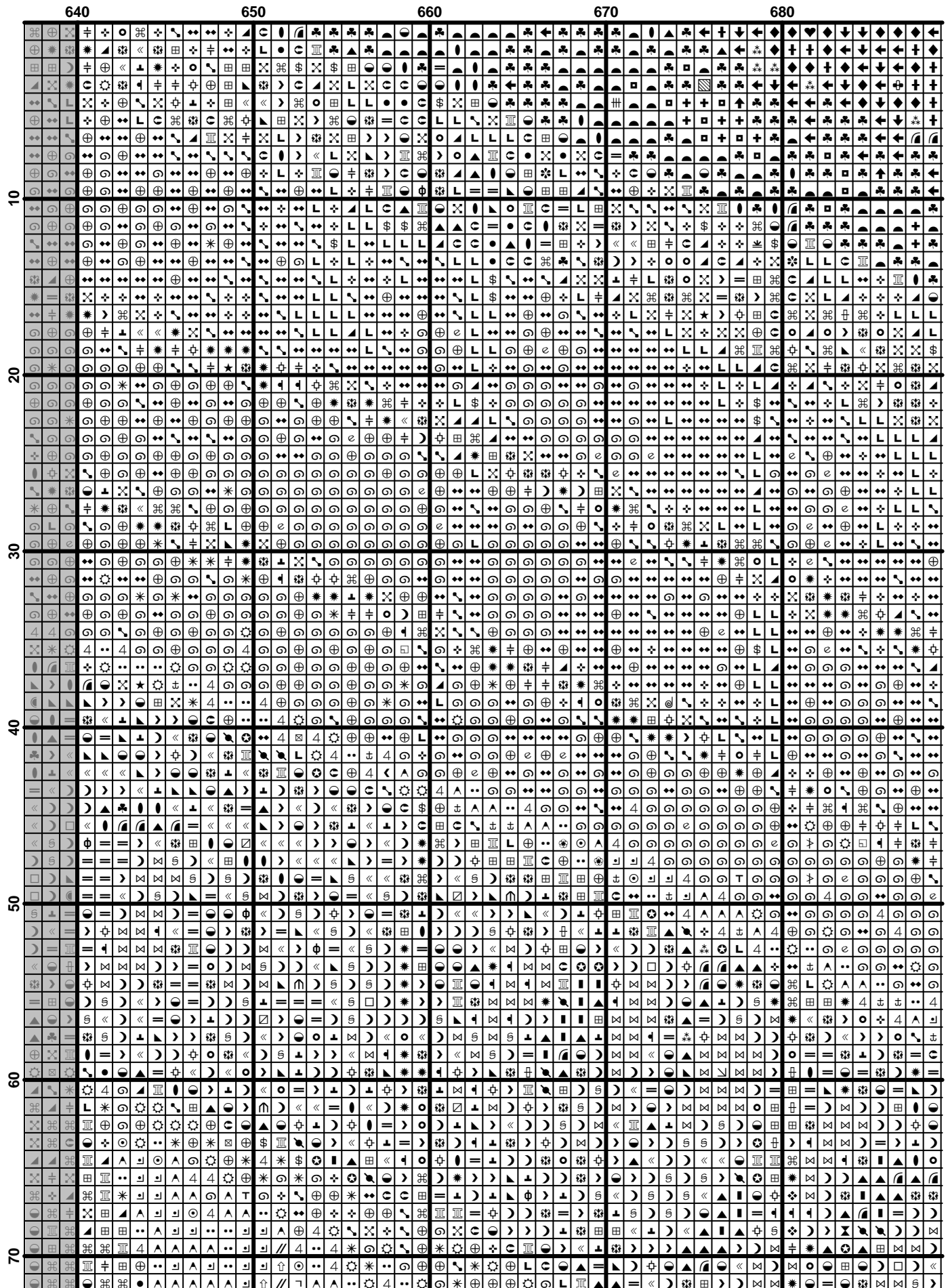




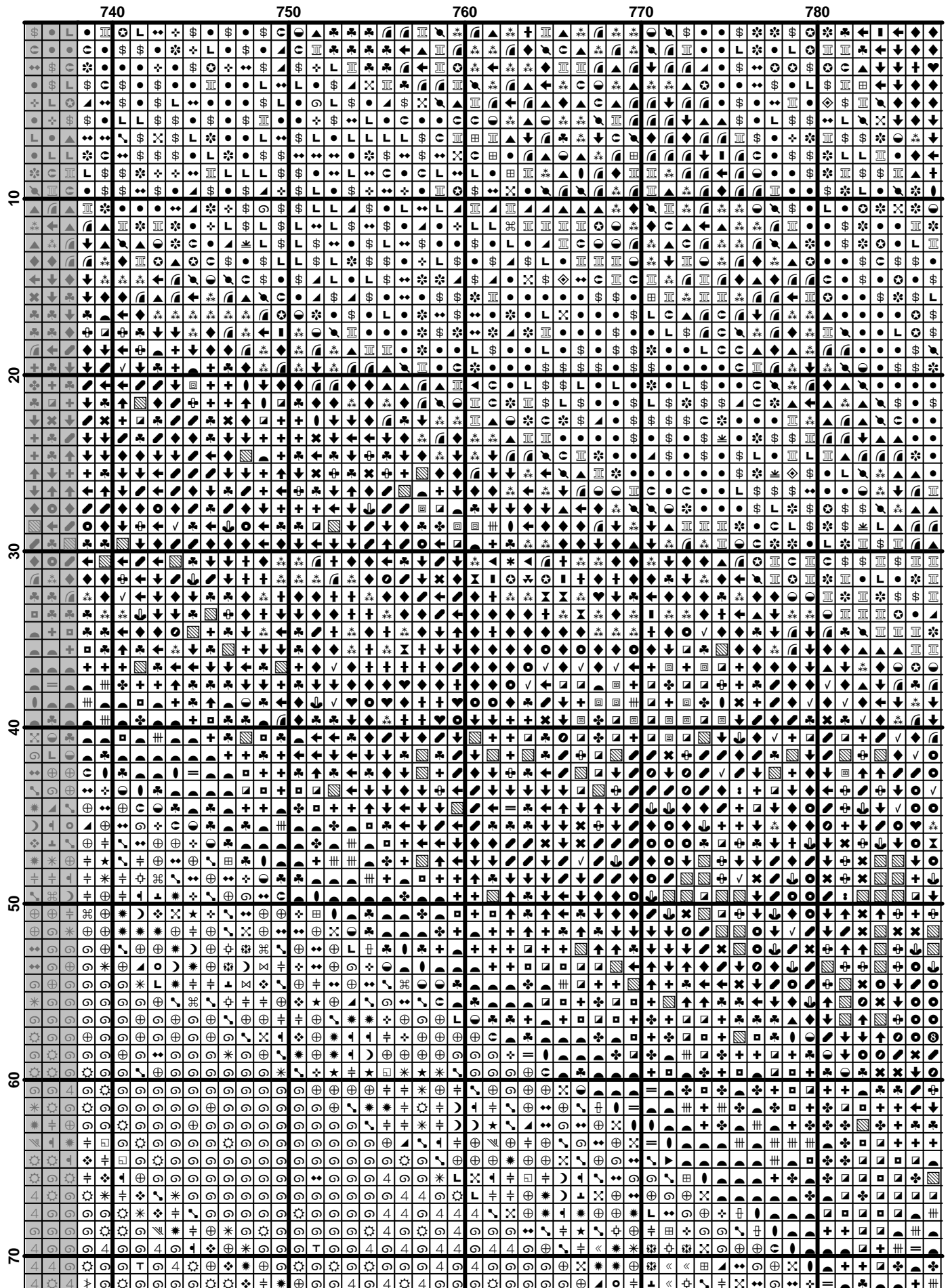


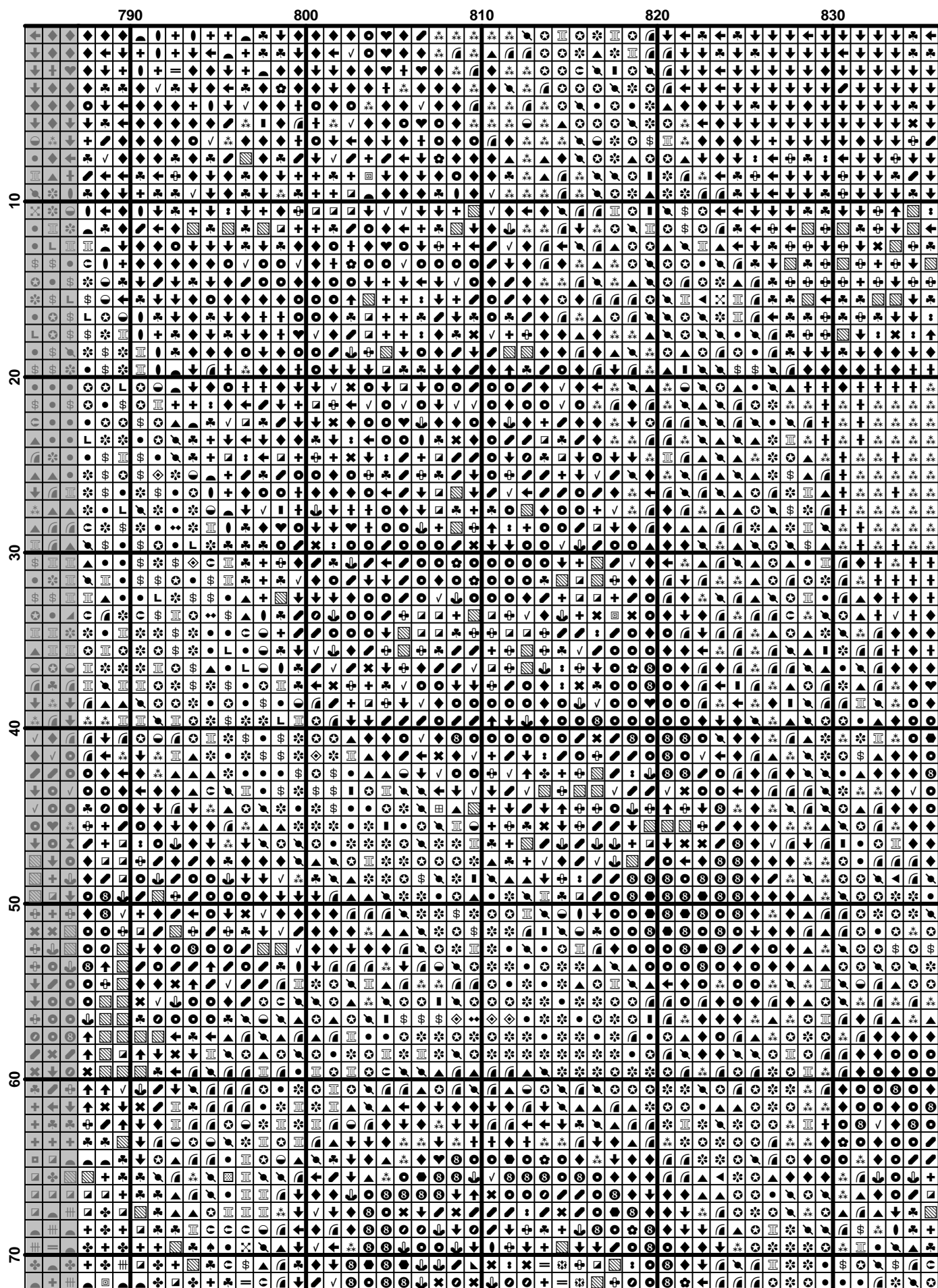


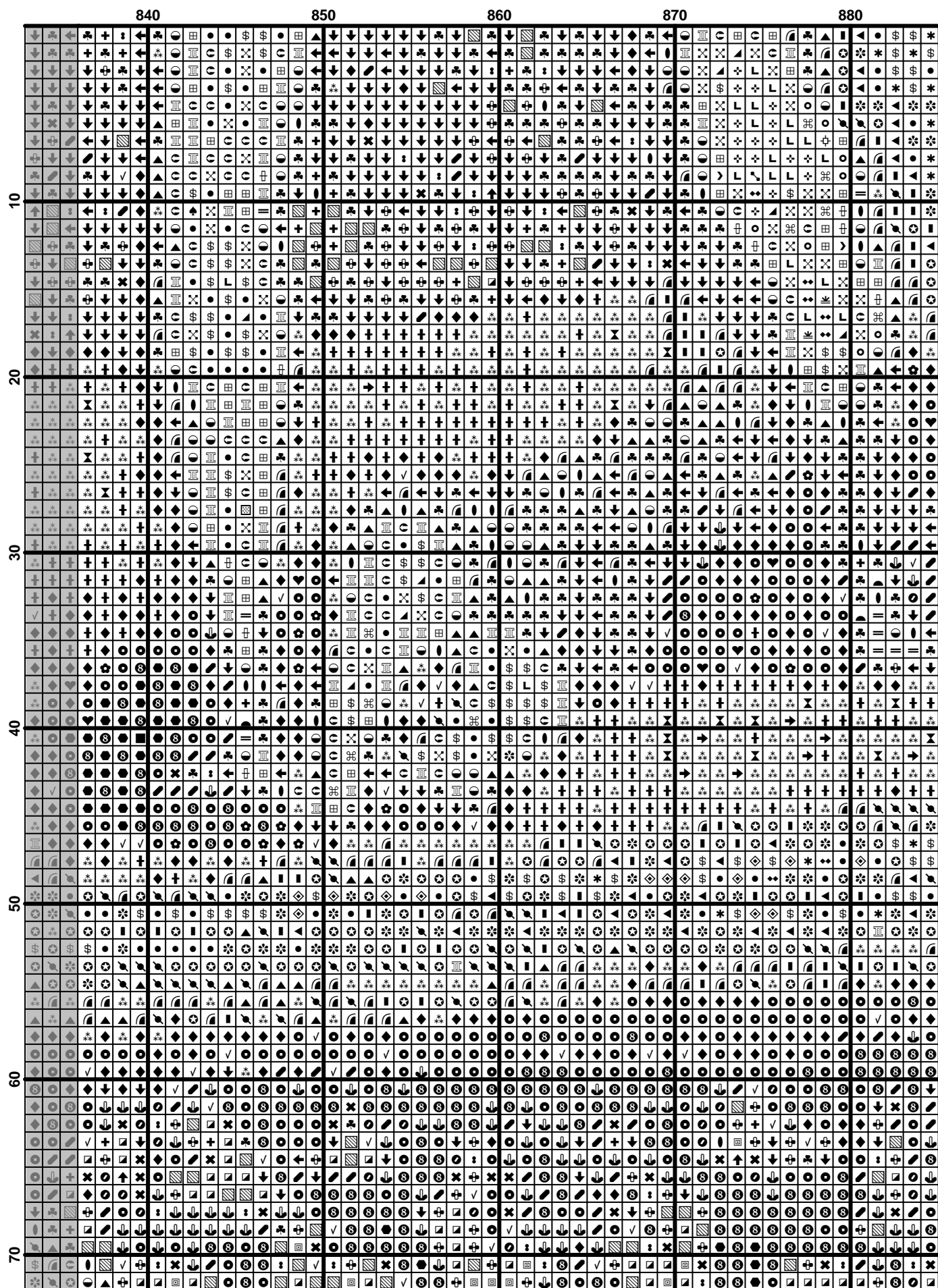


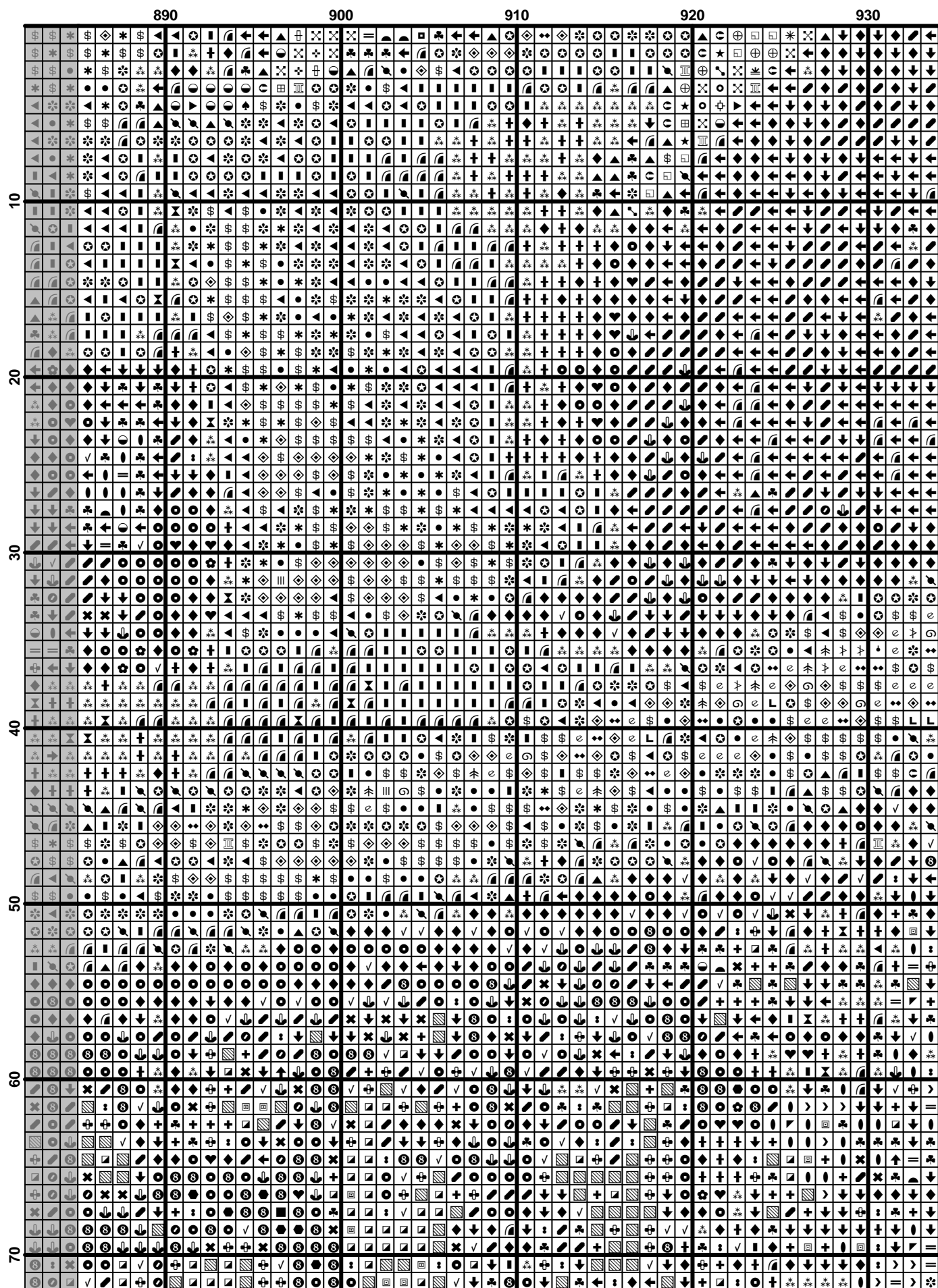


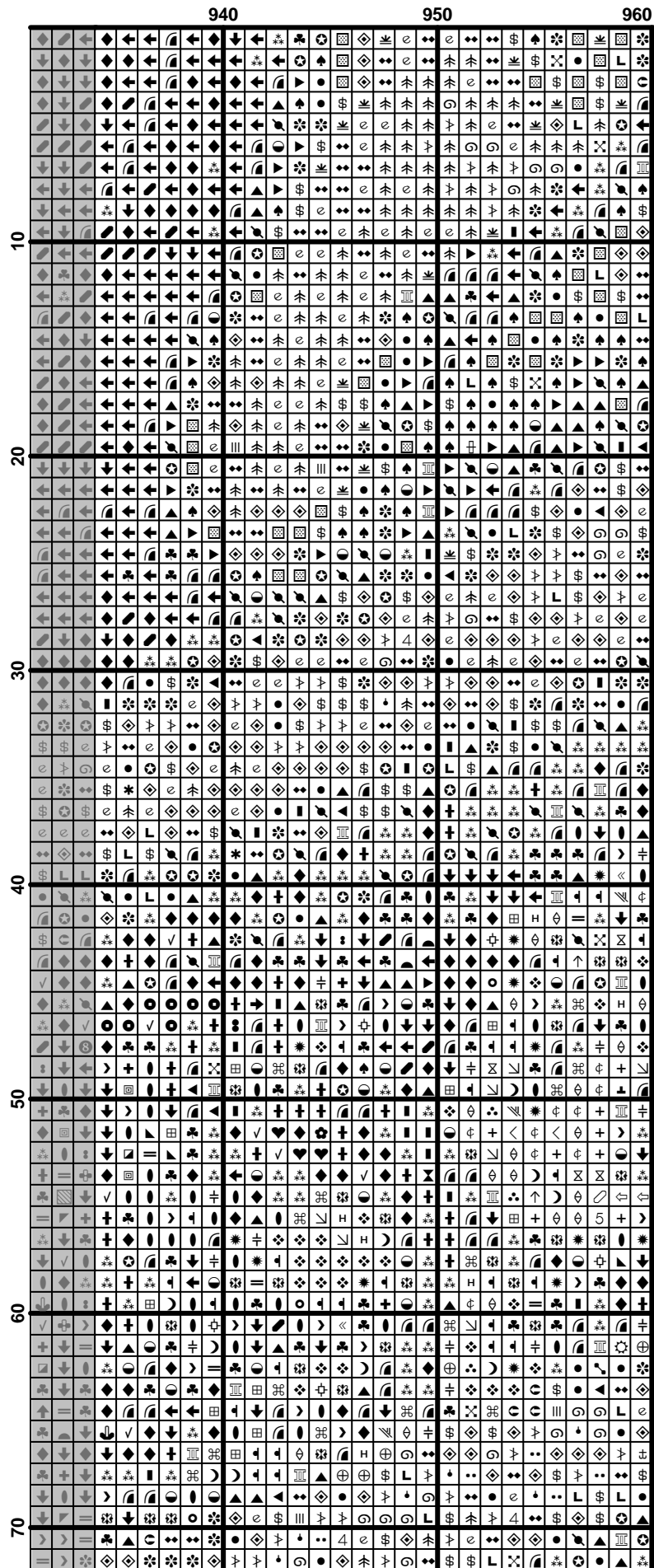




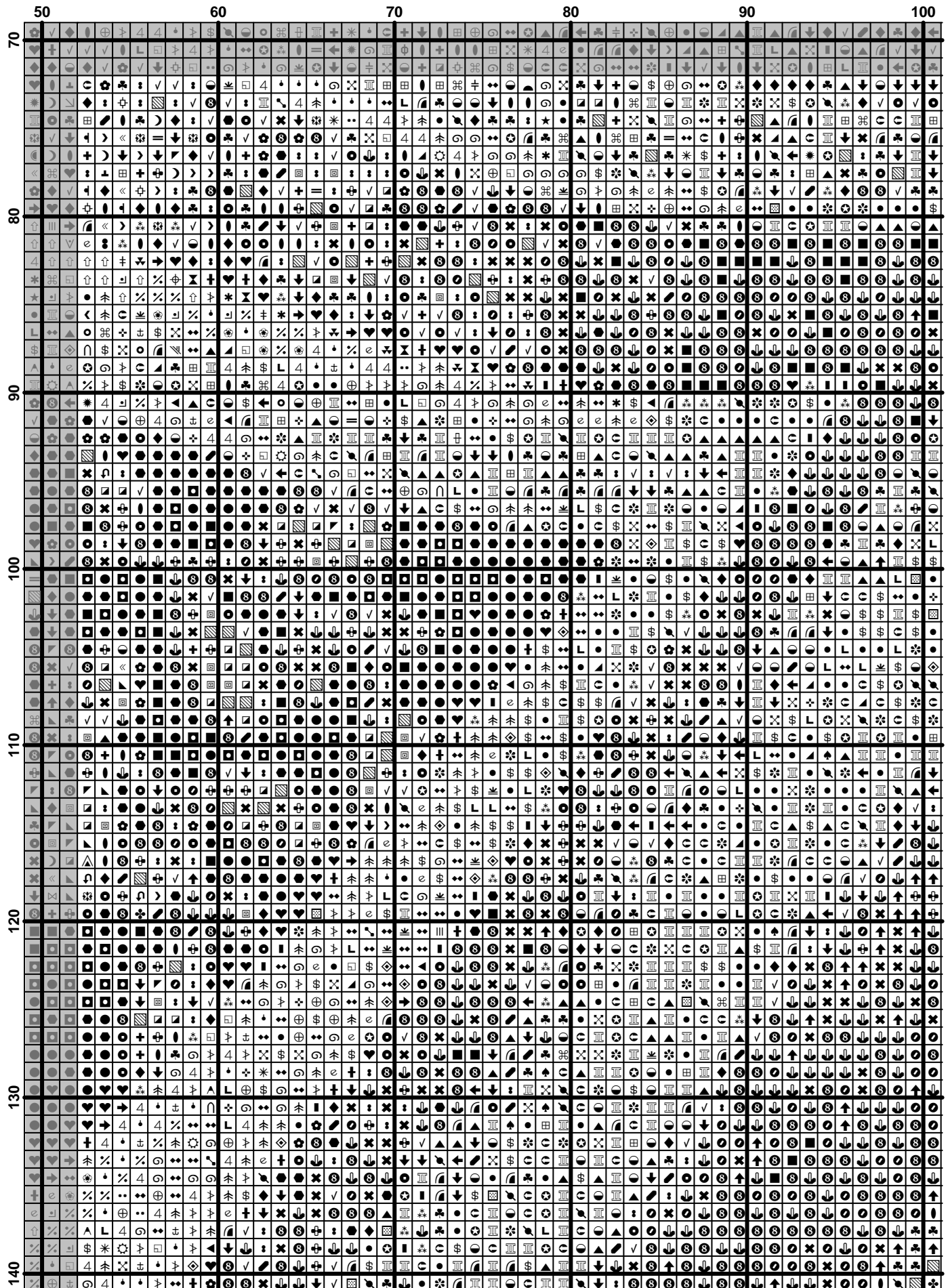


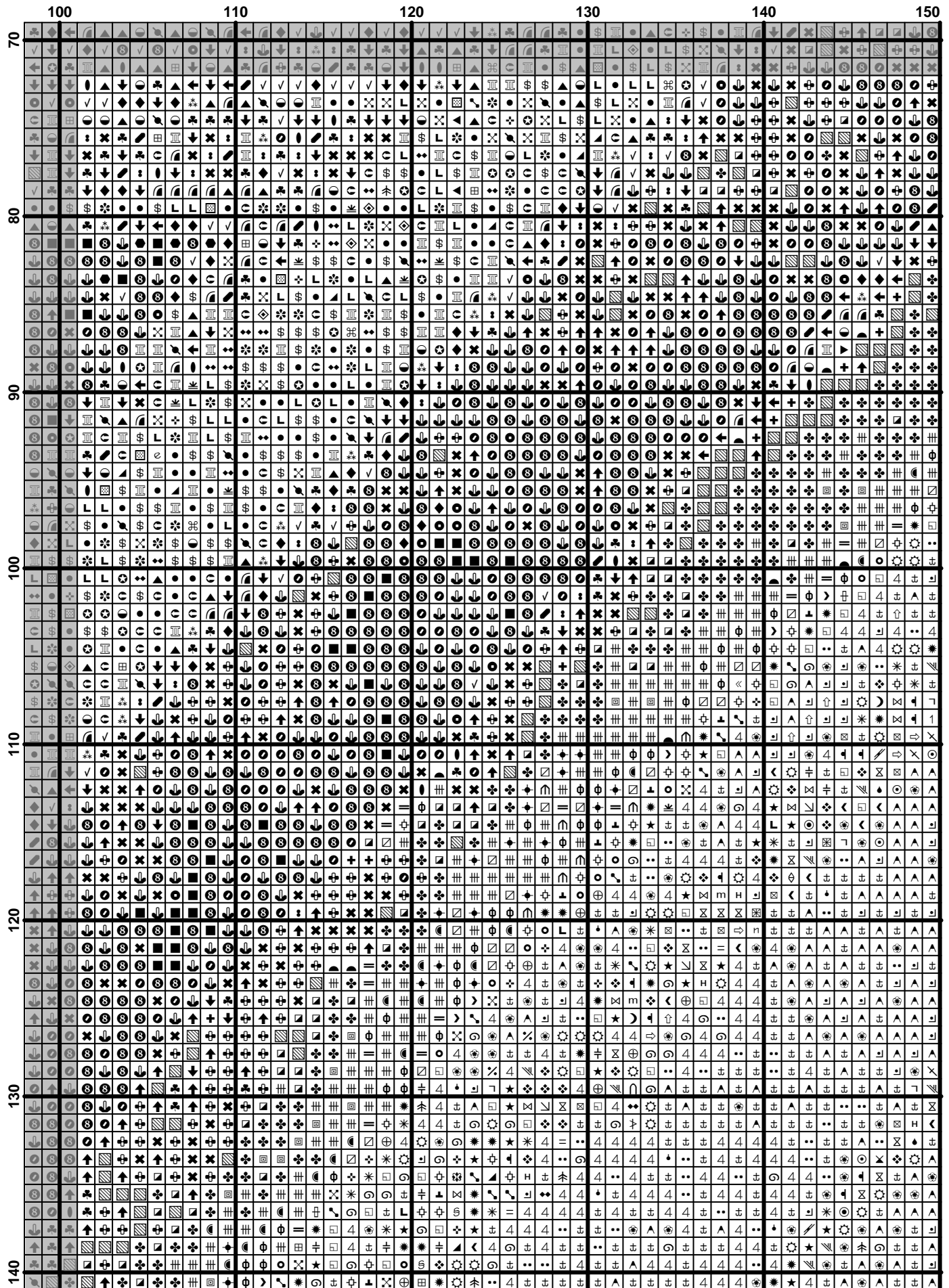


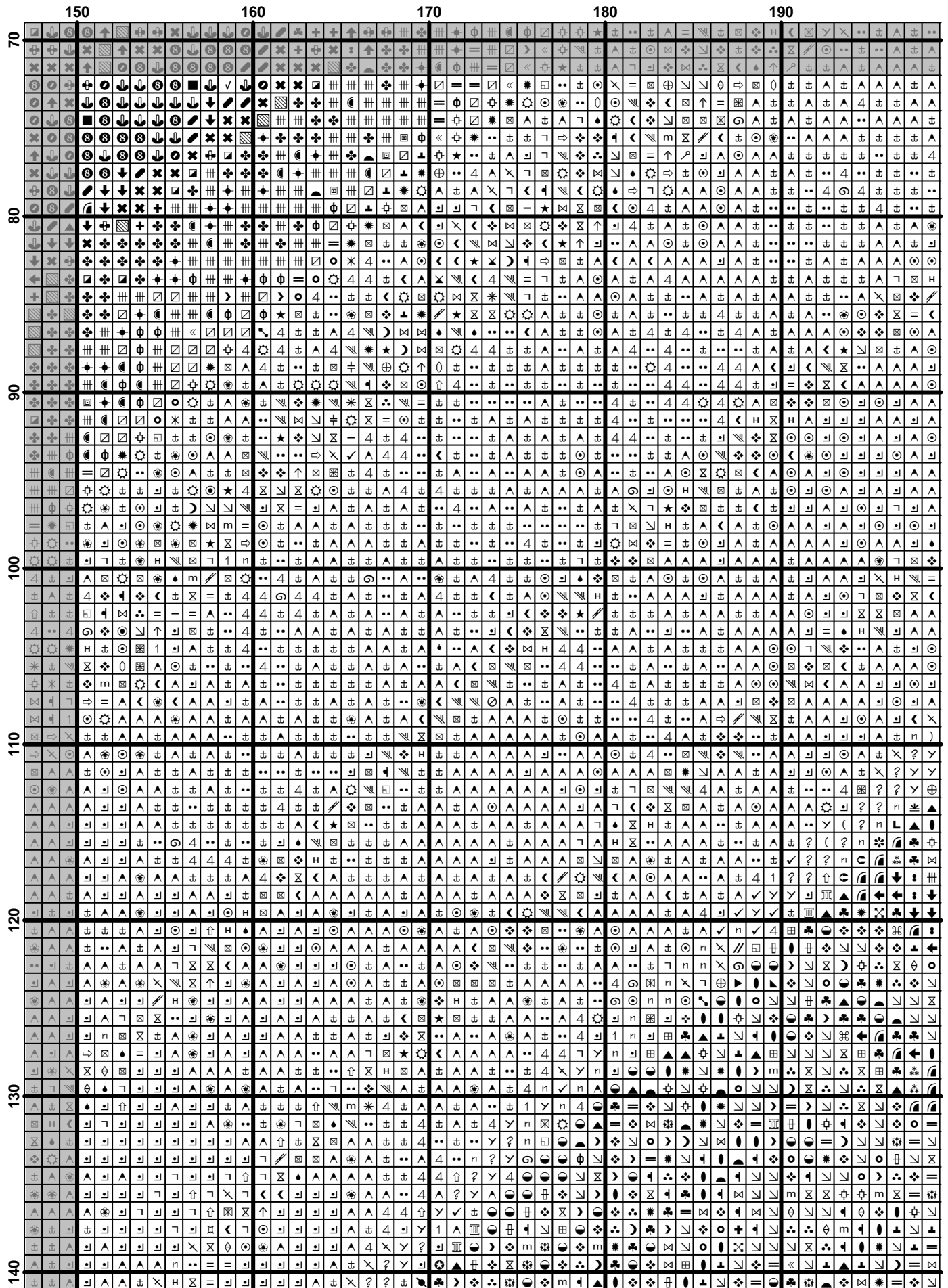




	10	20	30	40	50
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140					





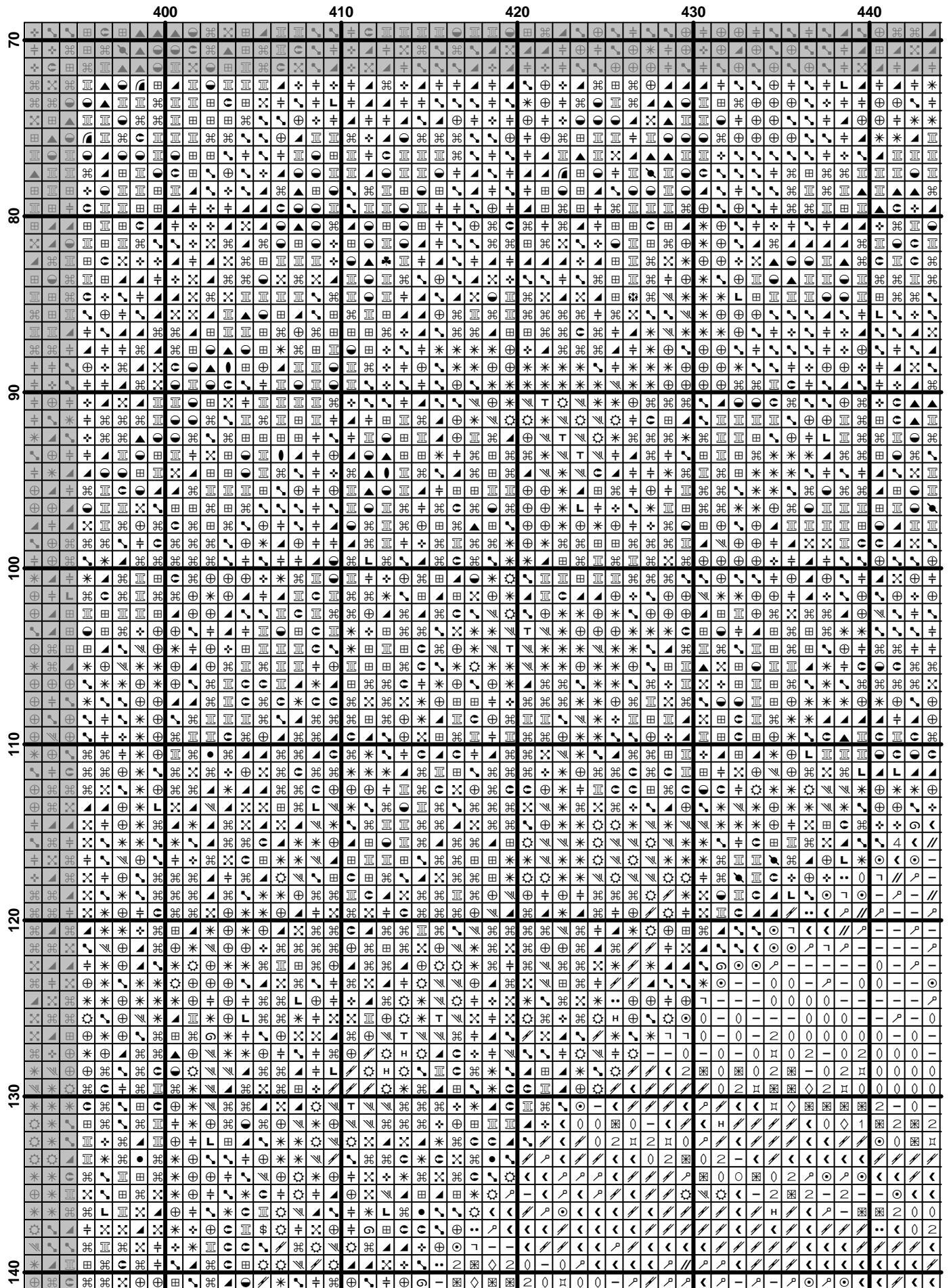


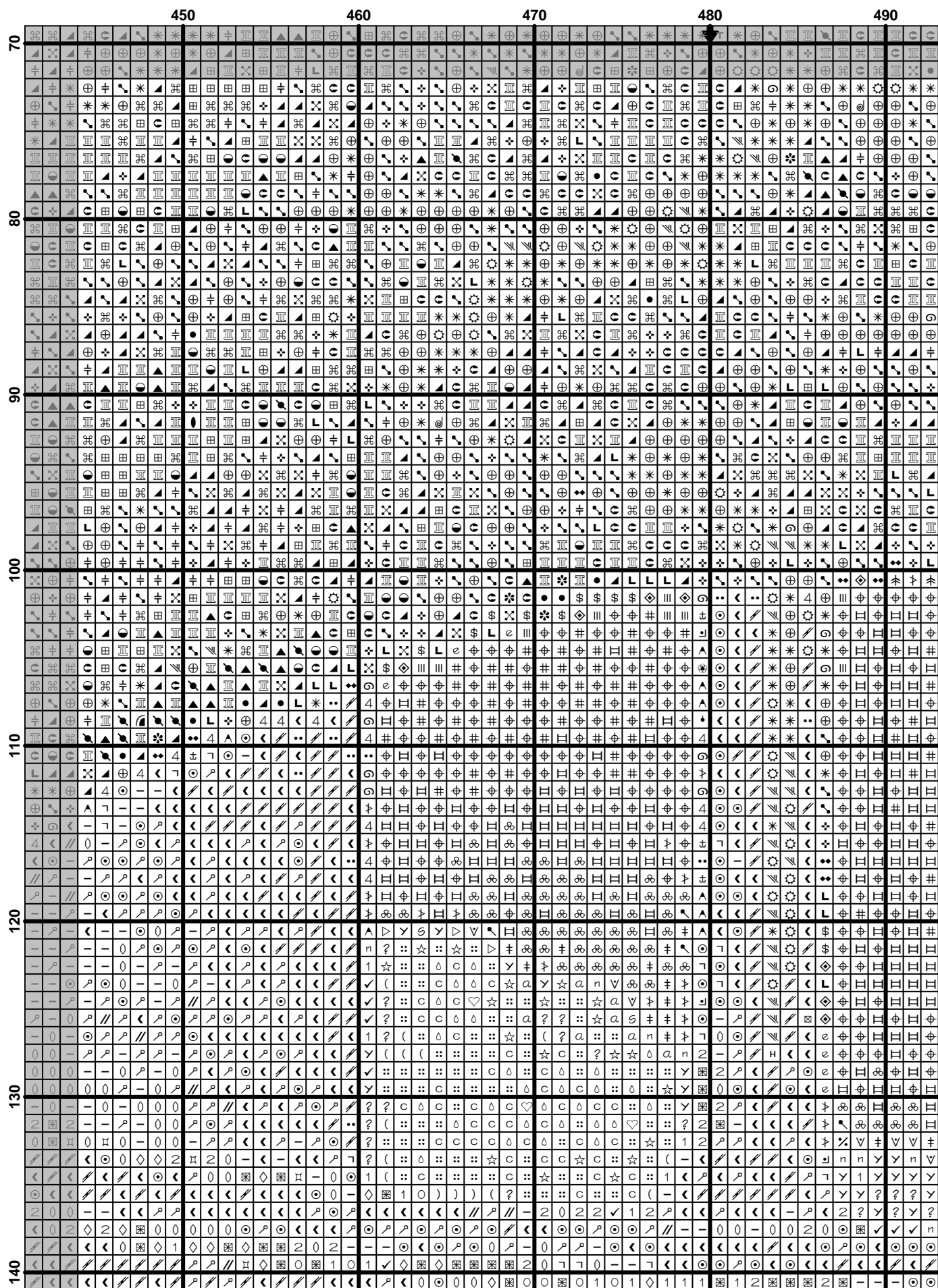
	200	210	220	230	240
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80					
90					
100					
110					
120					
130					
140					

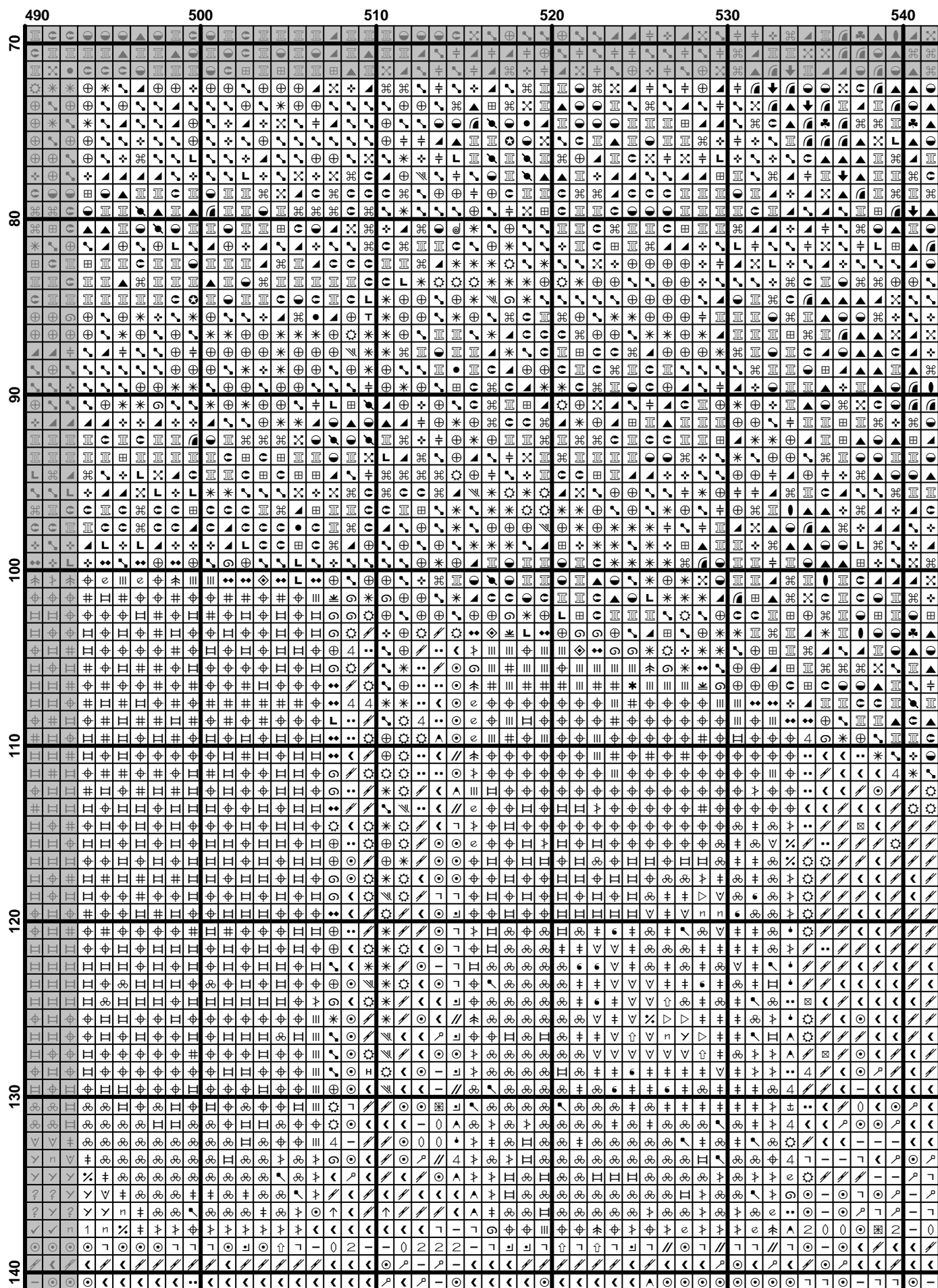
	250	260	270	280	290
70					
80					
90					
100					
110					
120					
130					
140					

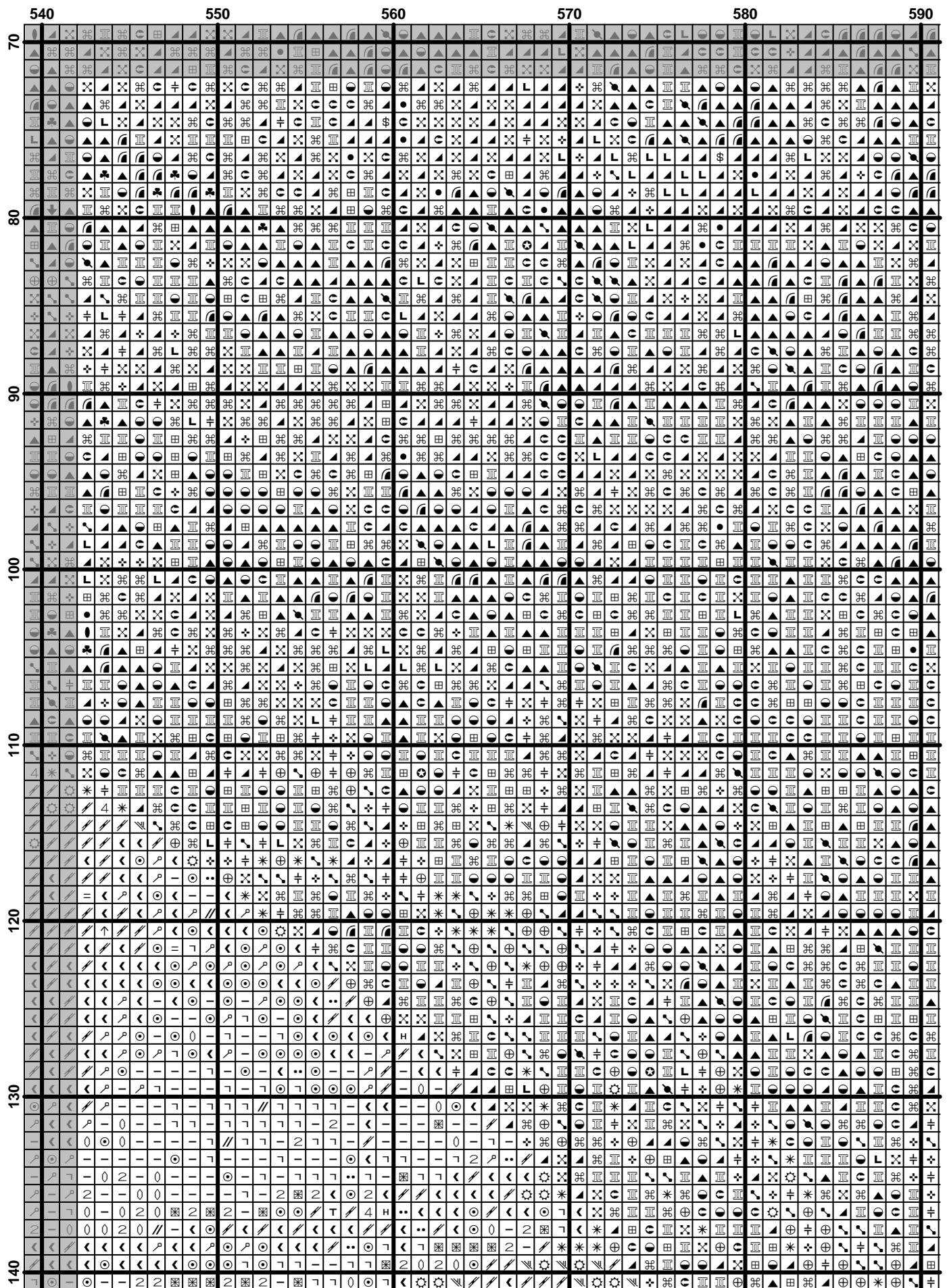
[illegible]

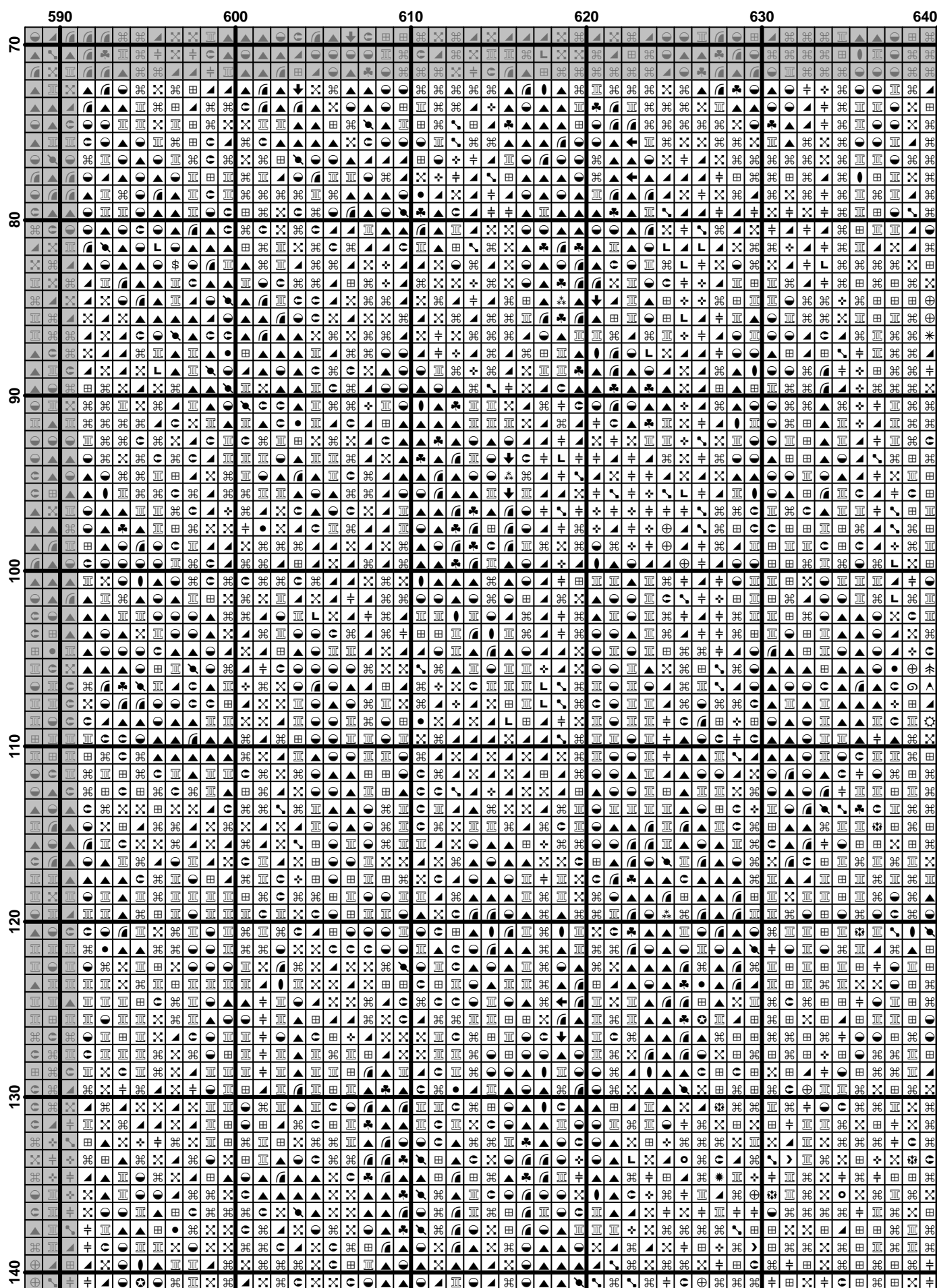
	350	360	370	380	390
70	70	70	70	70	70
80	80	80	80	80	80
90	90	90	90	90	90
100	100	100	100	100	100
110	110	110	110	110	110
120	120	120	120	120	120
130	130	130	130	130	130
140	140	140	140	140	140

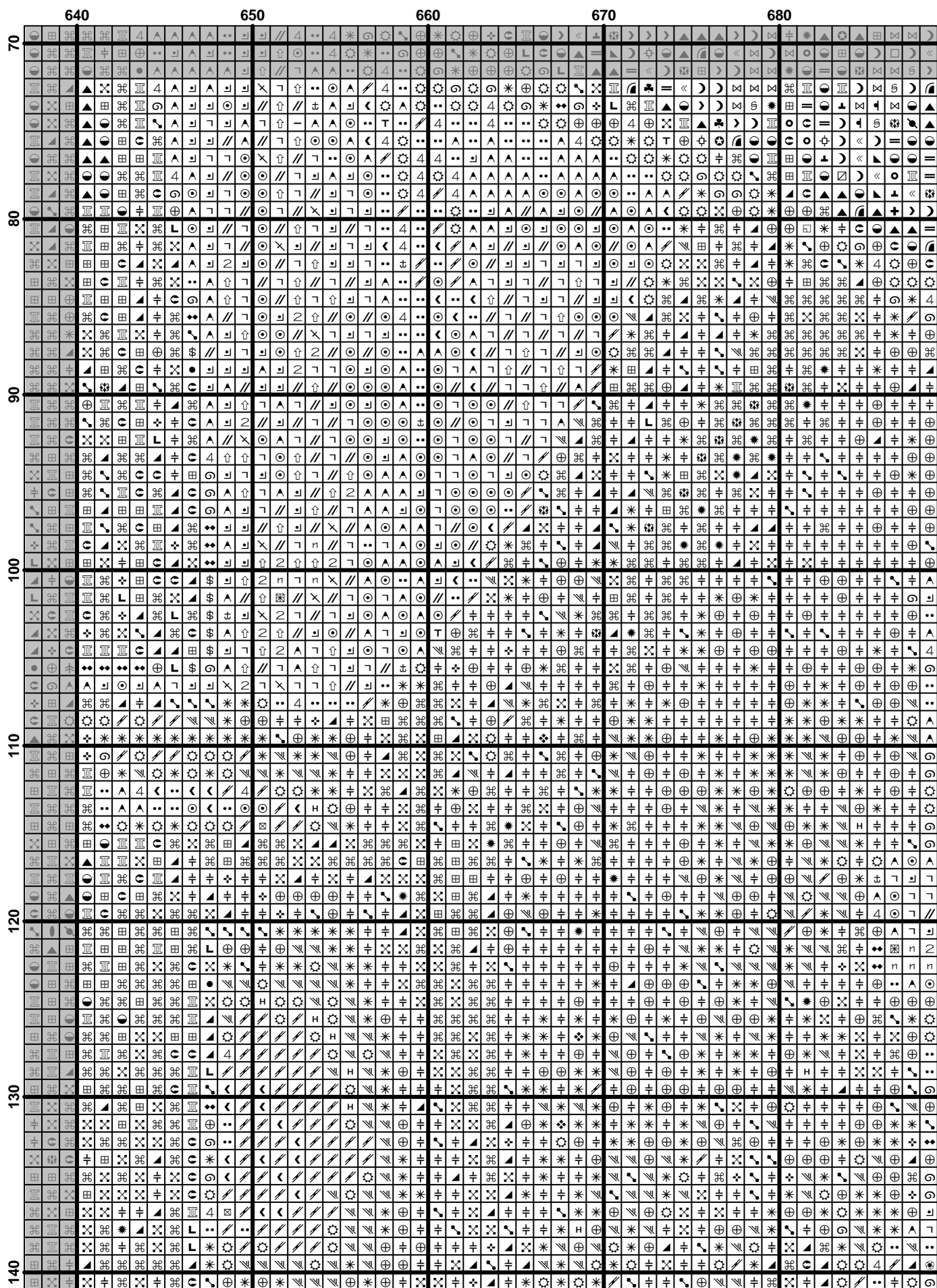








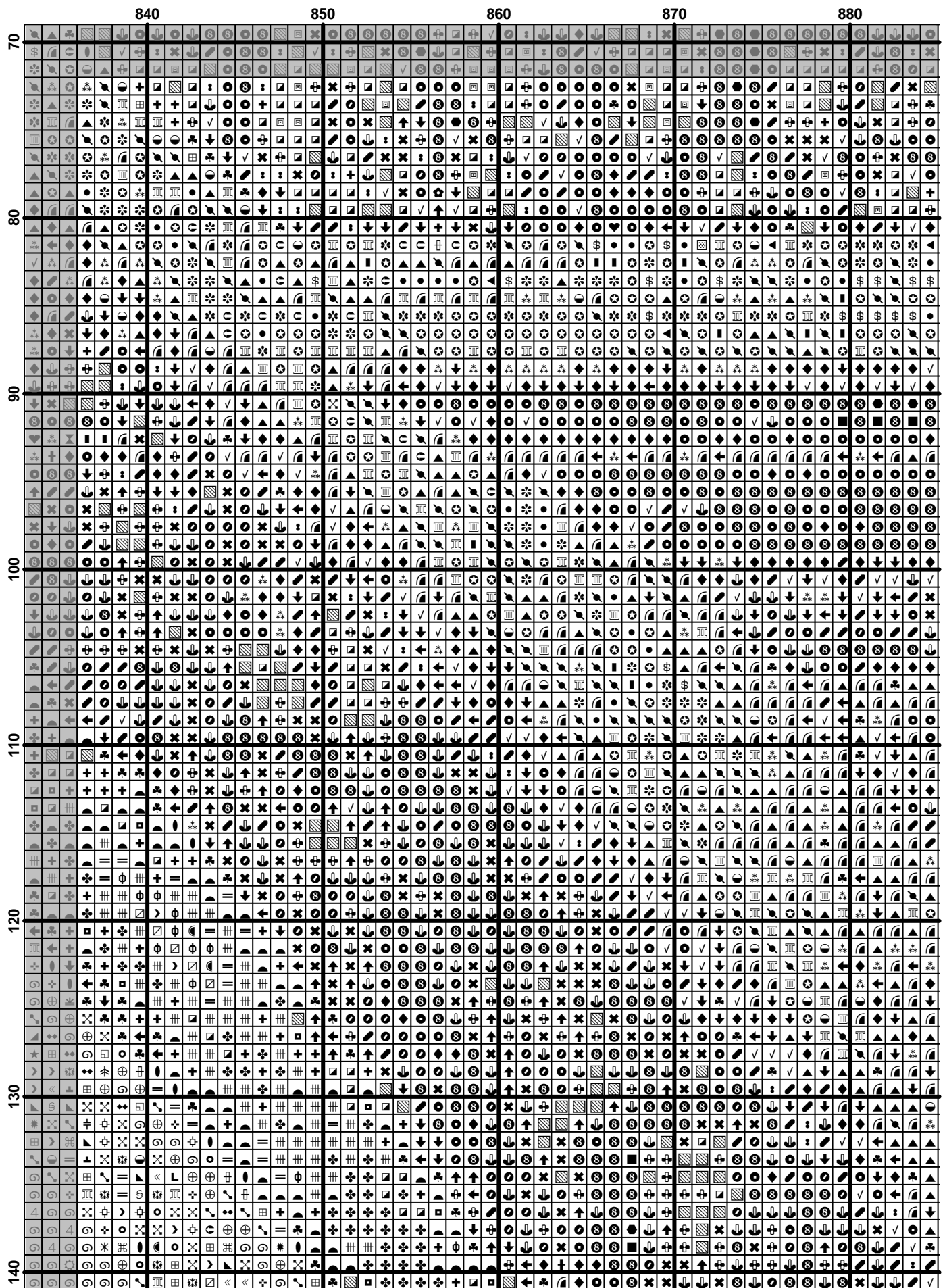


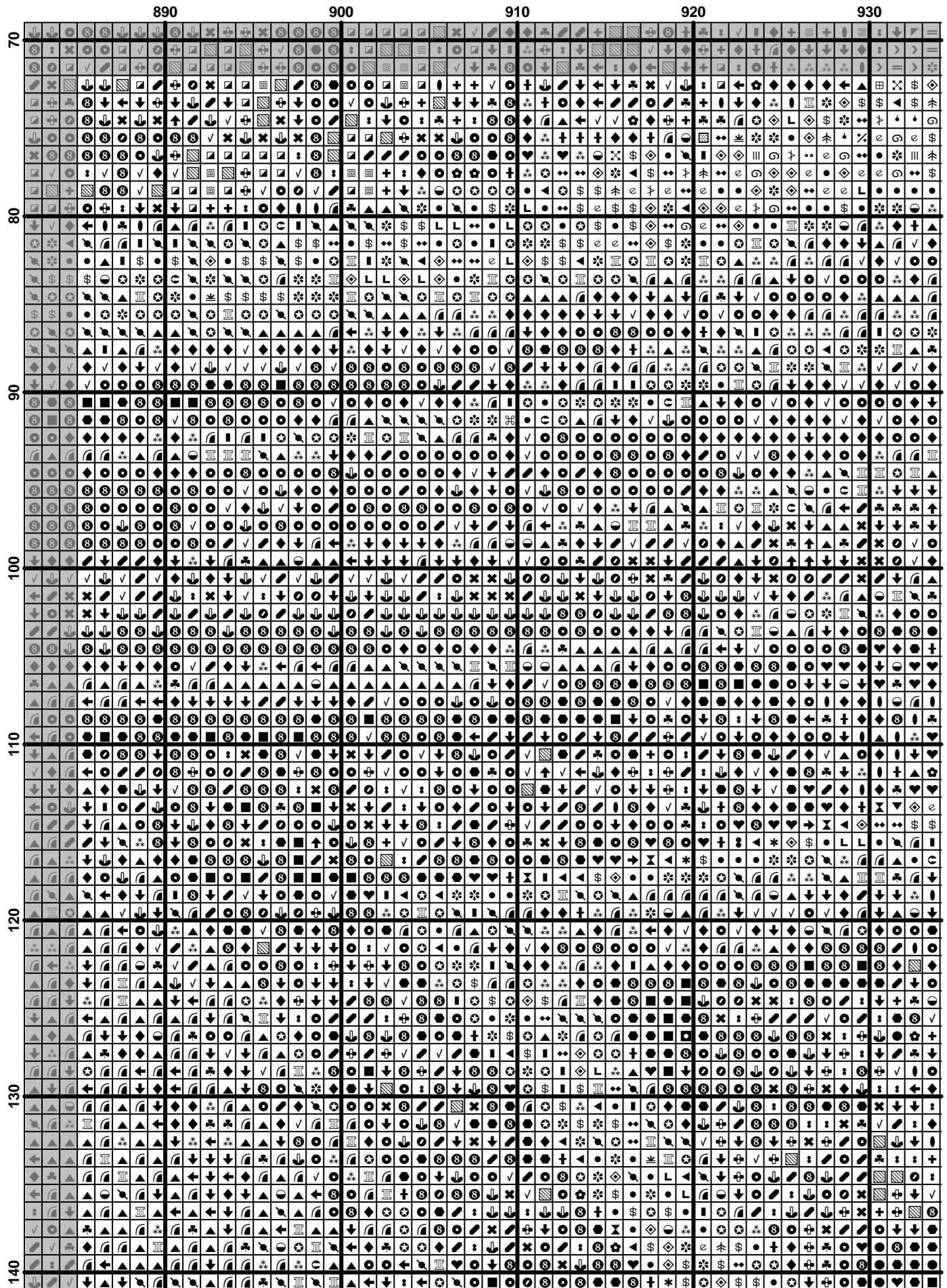


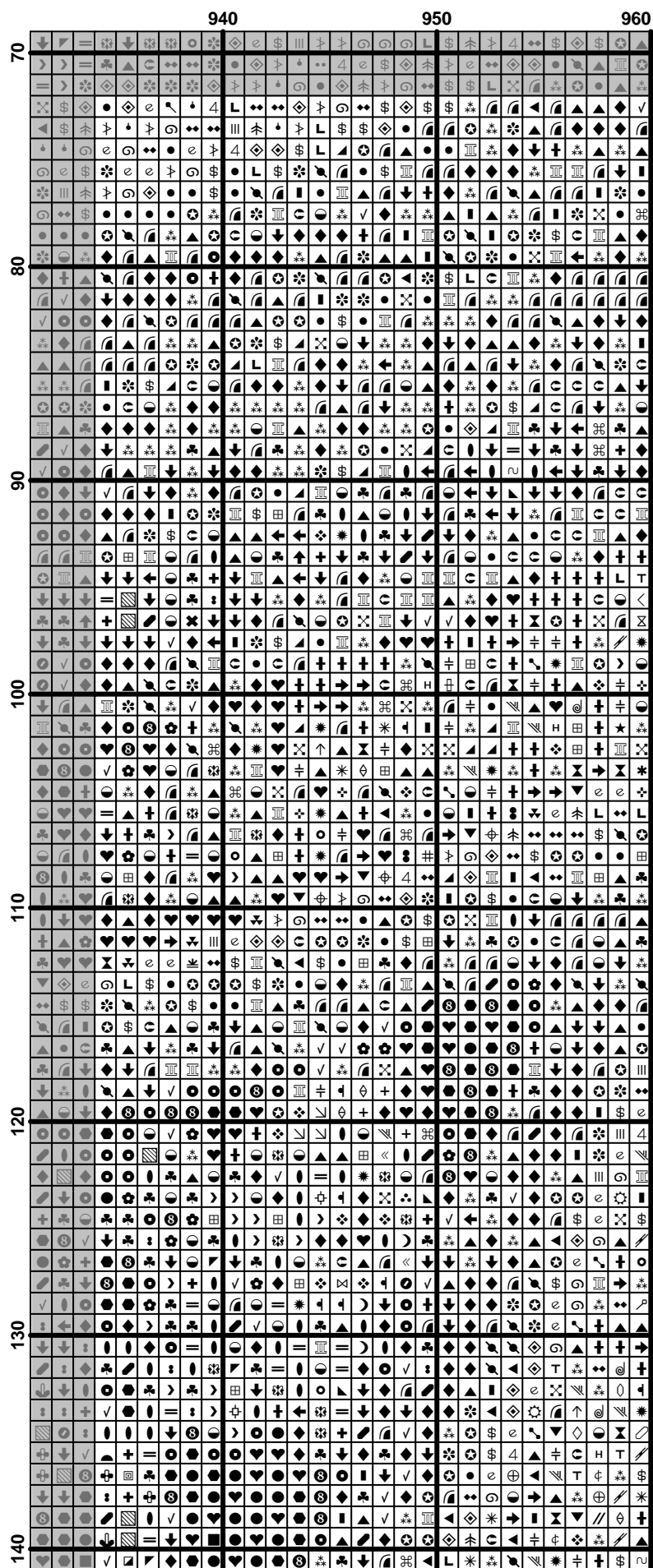
[illegible]

$$(56) \quad \begin{aligned} & \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \\ & \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \end{aligned} \quad (57)$$

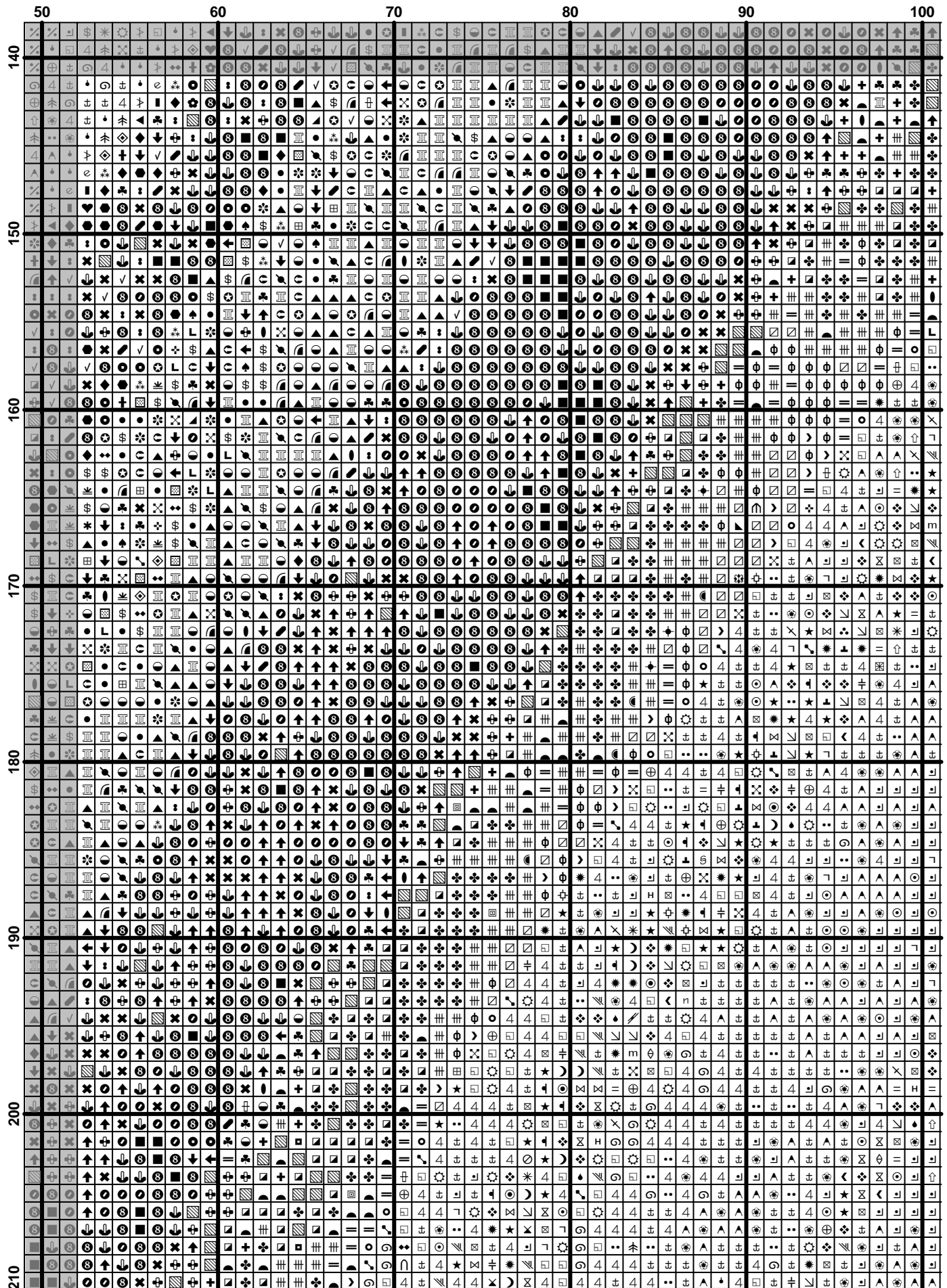


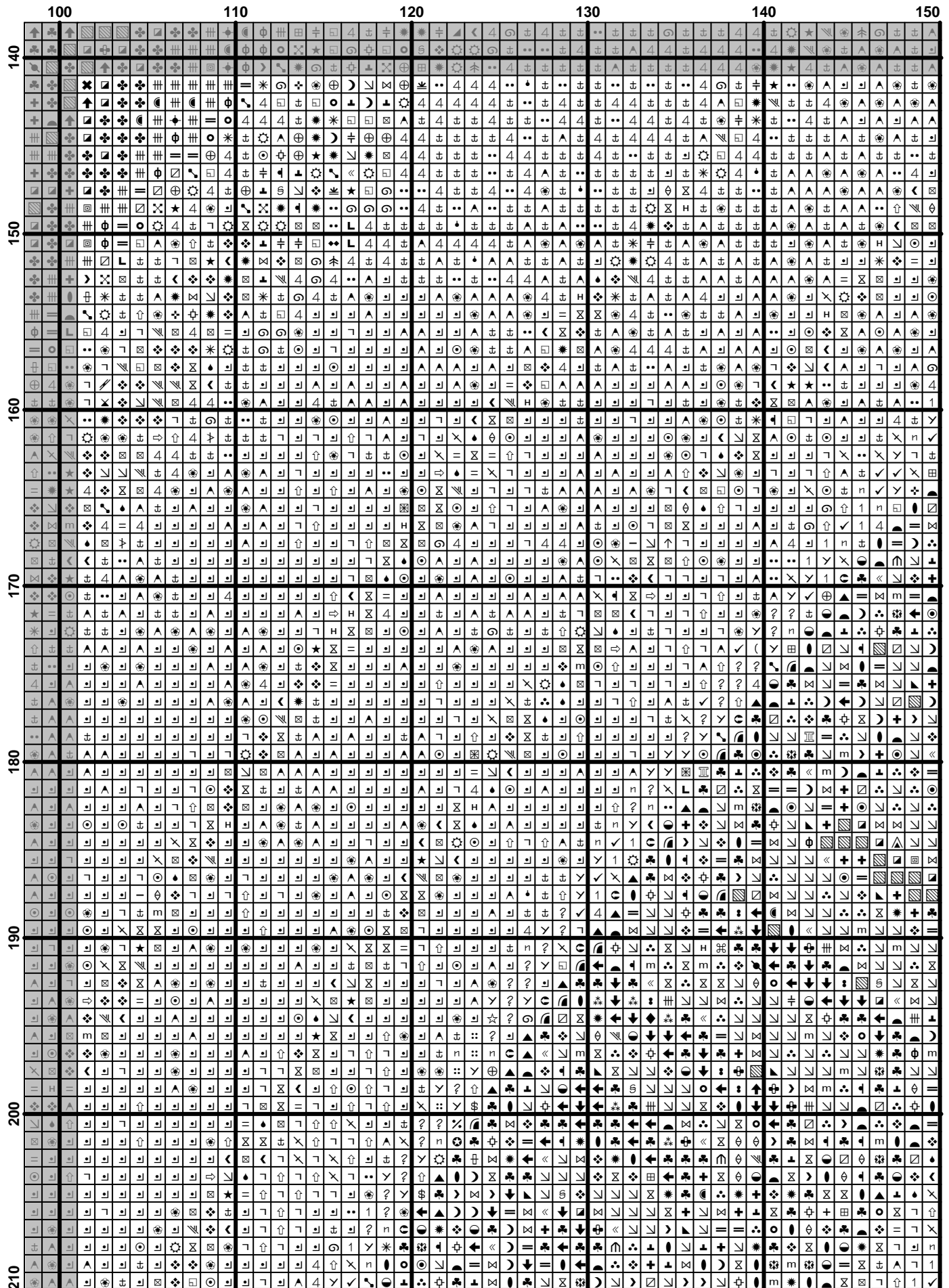






	10	20	30	40	50
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210





	150	160	170	180	190
140					
150					
160					
170					
180					
190					
200					
210					

[illegible]

$$(66) \quad \text{[...]} \quad (67)$$

(68)

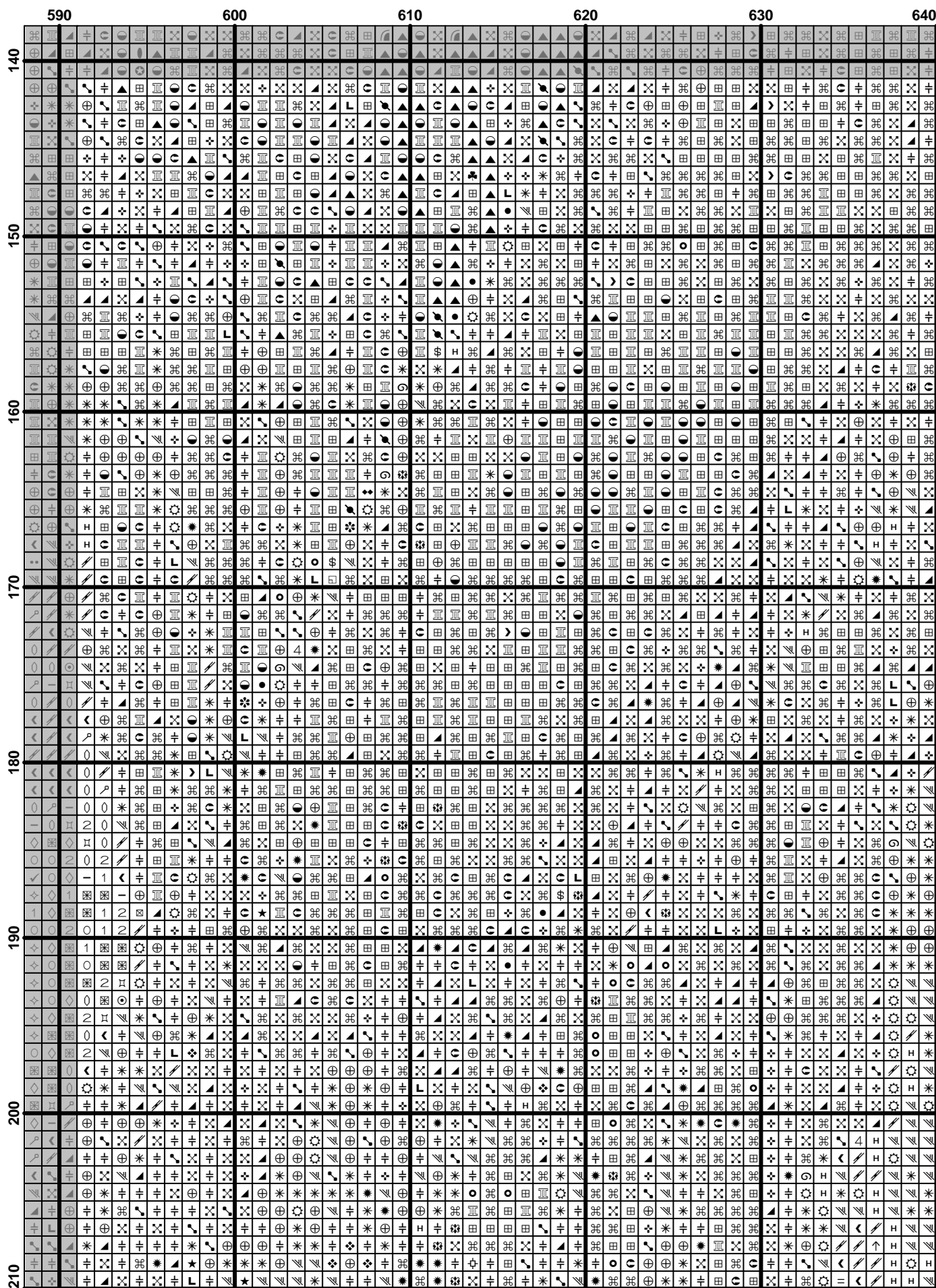
	350	360	370	380	390
140	140	140	140	140	140
150	150	150	150	150	150
160	160	160	160	160	160
170	170	170	170	170	170
180	180	180	180	180	180
190	190	190	190	190	190
200	200	200	200	200	200
210	210	210	210	210	210

	400										410										420										430										440																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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	450	460	470	480	490
140					
150					
160					
170					
180					
190					
200					
210					

$$(71) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \mathcal{I}_\alpha f(t), \quad t \in [0, T],$$

	540	550	560	570	580	590
140
150
160
170
180
190
200
210



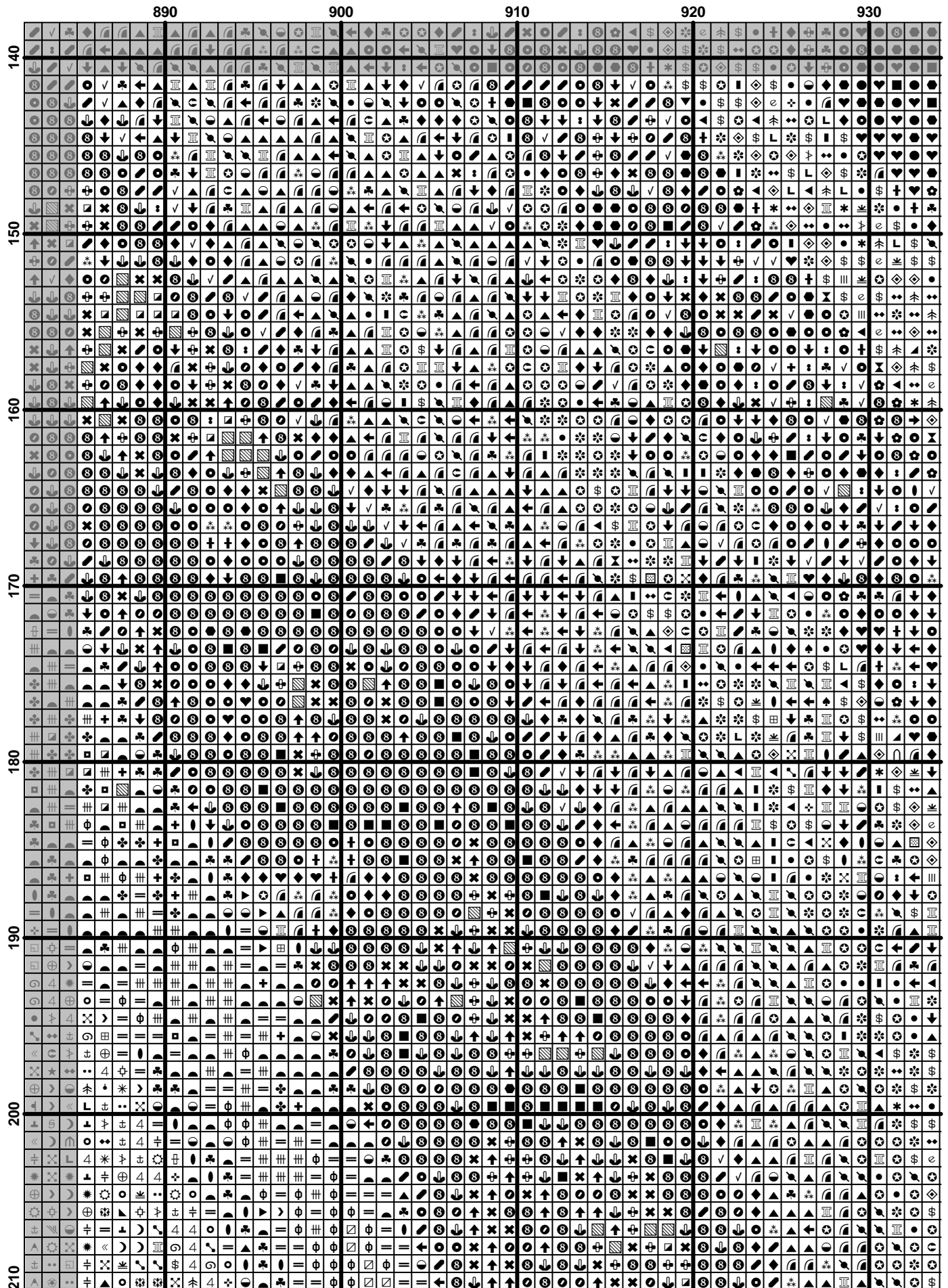
	640	650	660	670	680
140					
150					
160					
170					
180					
190					
200					
210					

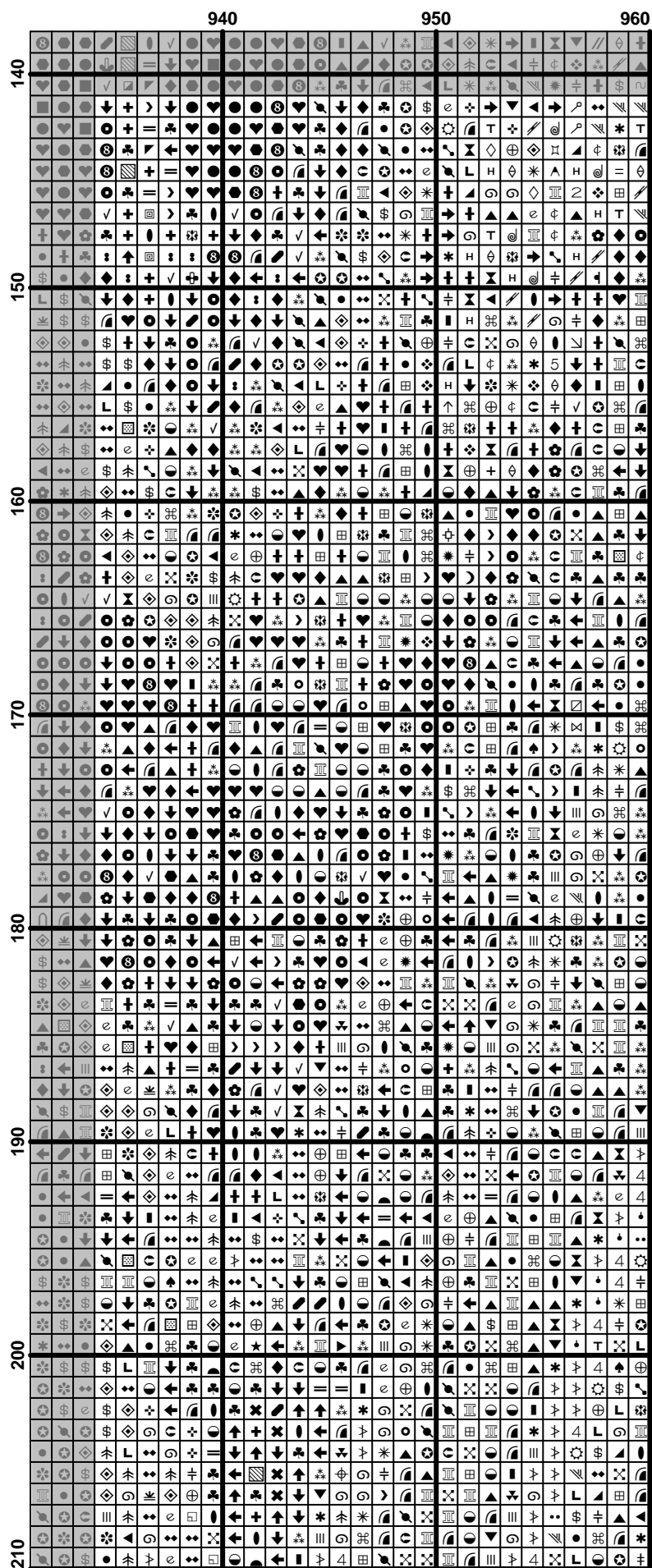
	690	700	710	720	730
140
150
160
170
180
190
200
210

$$(76) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \mathcal{I}_\alpha f(t), \quad t \in [0, T],$$

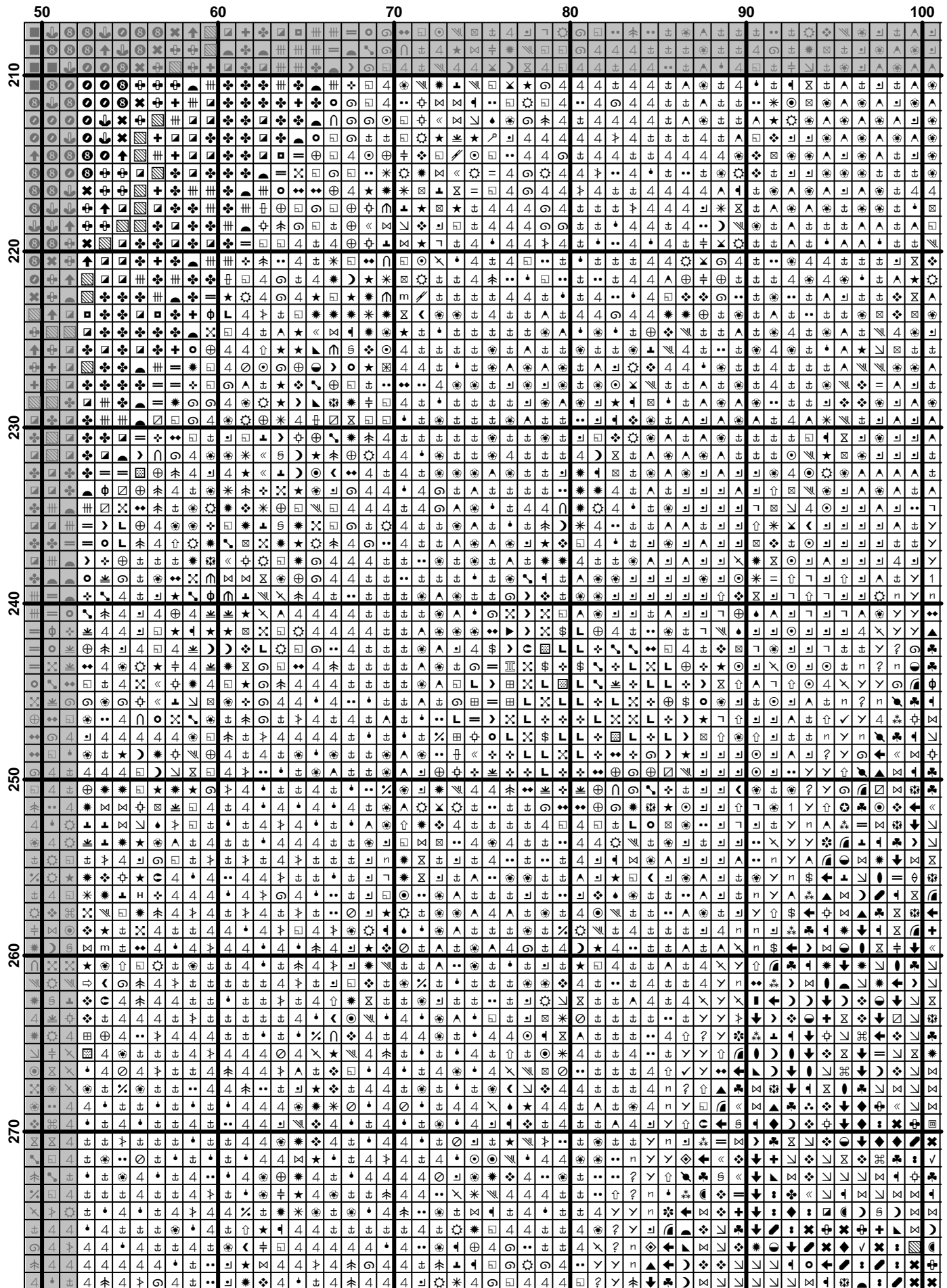
	790	800	810	820	830
140
150
160
170
180
190
200
210







	10	20	30	40	50
210	4	4	4	4	4
220	4	4	4	4	4
230	4	4	4	4	4
240	4	4	4	4	4
250	4	4	4	4	4
260	4	4	4	4	4
270	4	4	4	4	4



	100	110	120	130	140	150
210						
220						
230						
240						
250						
260						
270						

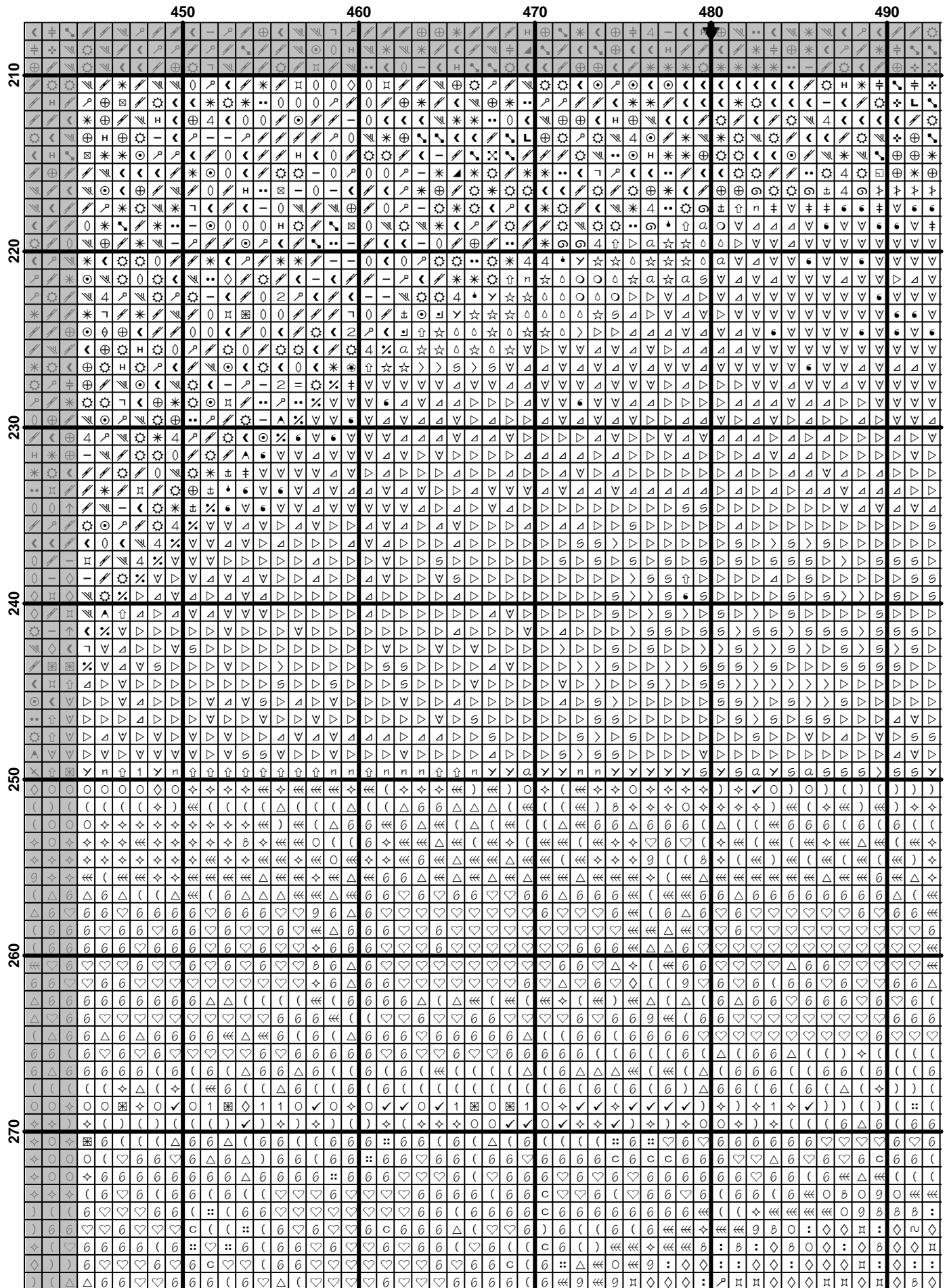
[illegible]

$$(86) \quad \begin{aligned} & \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \\ & \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \end{aligned} \quad (87)$$

[illegible]

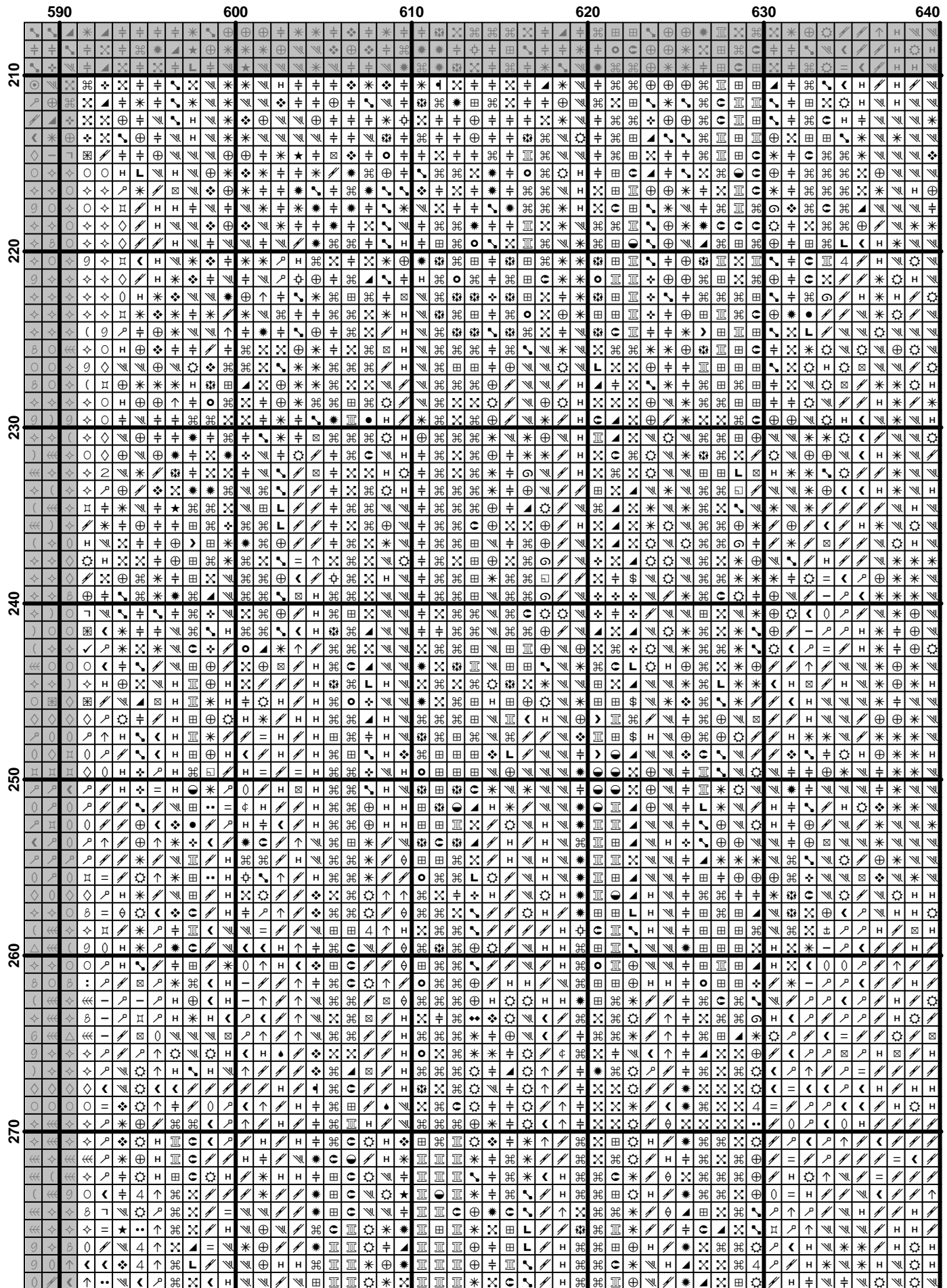
	350	360	370	380	390
210
220
230
240
250
260
270

[illegible]



[illegible]

(93)



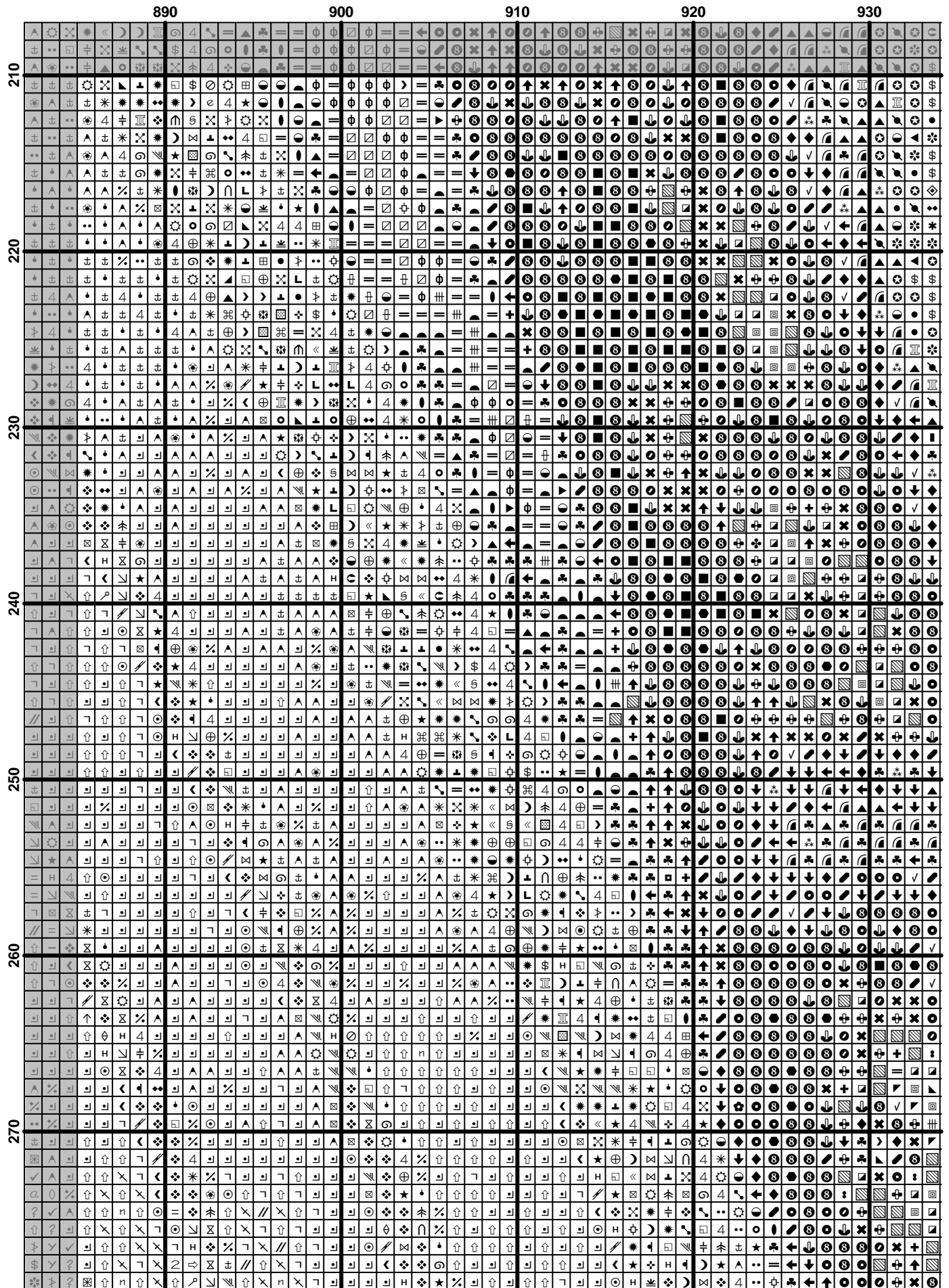
	640	650	660	670	680
210					
220					
230					
240					
250					
260					
270					

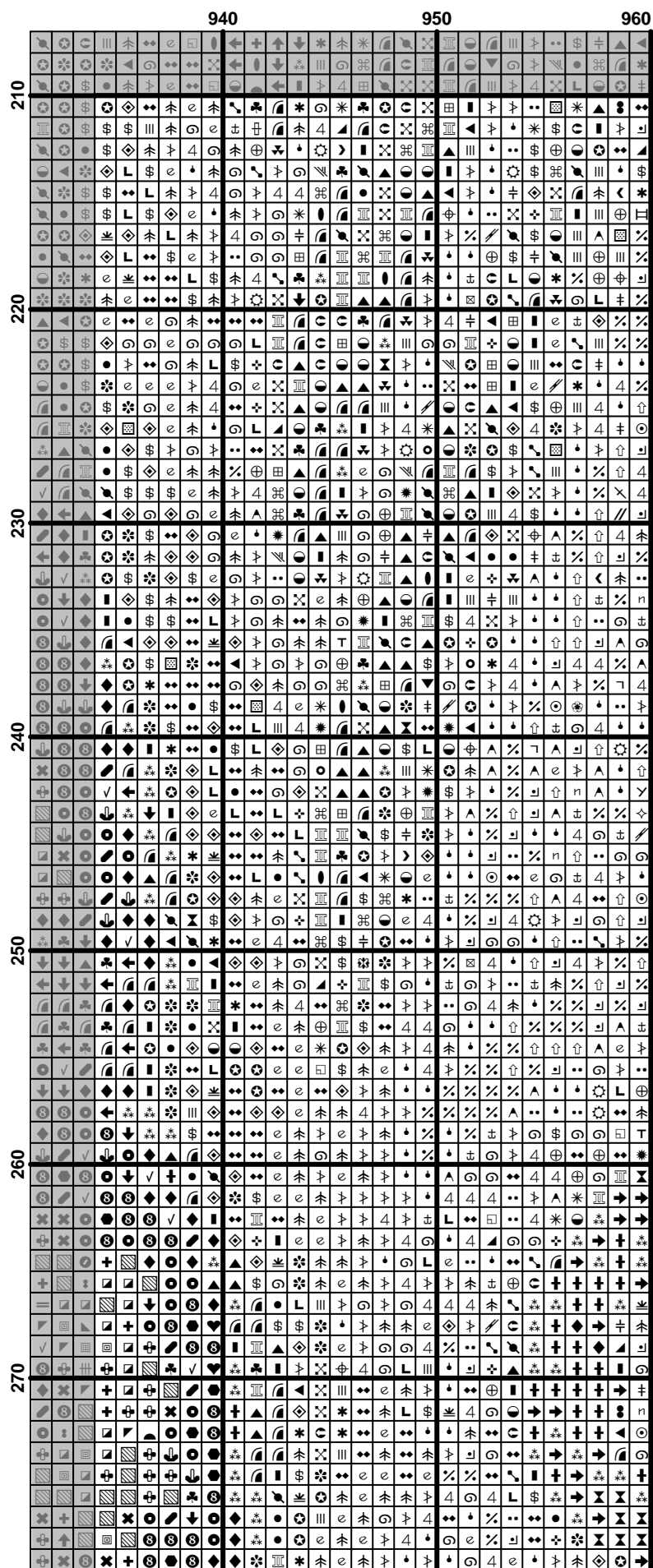
(96)

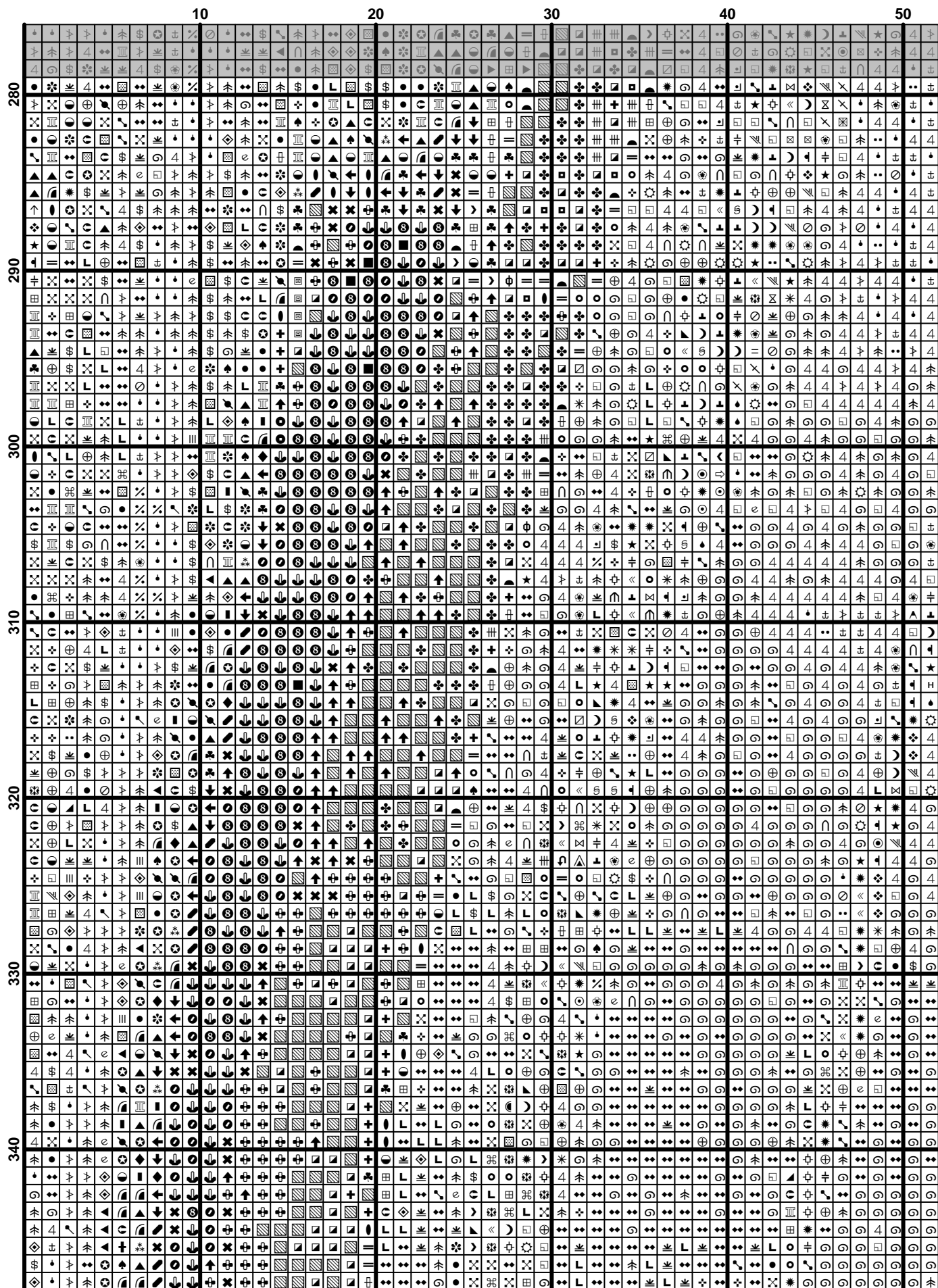
$$(96) \quad \begin{aligned} & \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \\ & \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \left(\frac{\partial}{\partial t} + \nabla_{\vec{v}} \right) \end{aligned} \quad (97)$$

	790	800	810	820	830
210
220
230
240
250
260
270

	840	850	860	870	880
210
220
230
240
250
260
270







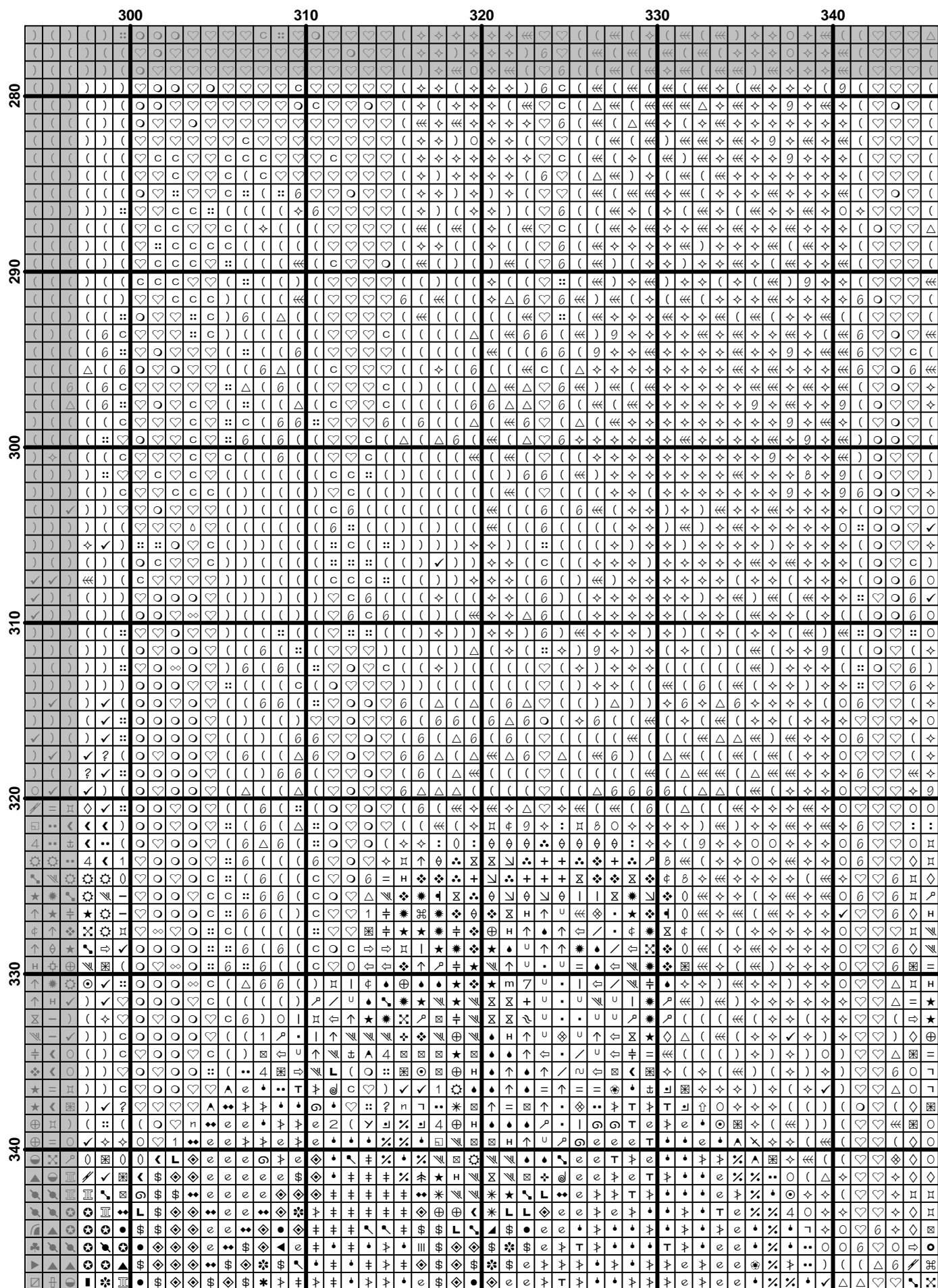
(103)

	100	110	120	130	140	150
280
290
300
310
320
330
340

(105)

$$(105) \quad \text{[The following is a list of the names of the members of the committee.]} \quad (106)$$

	250	260	270	280	290
280
290
300
310
320
330
340



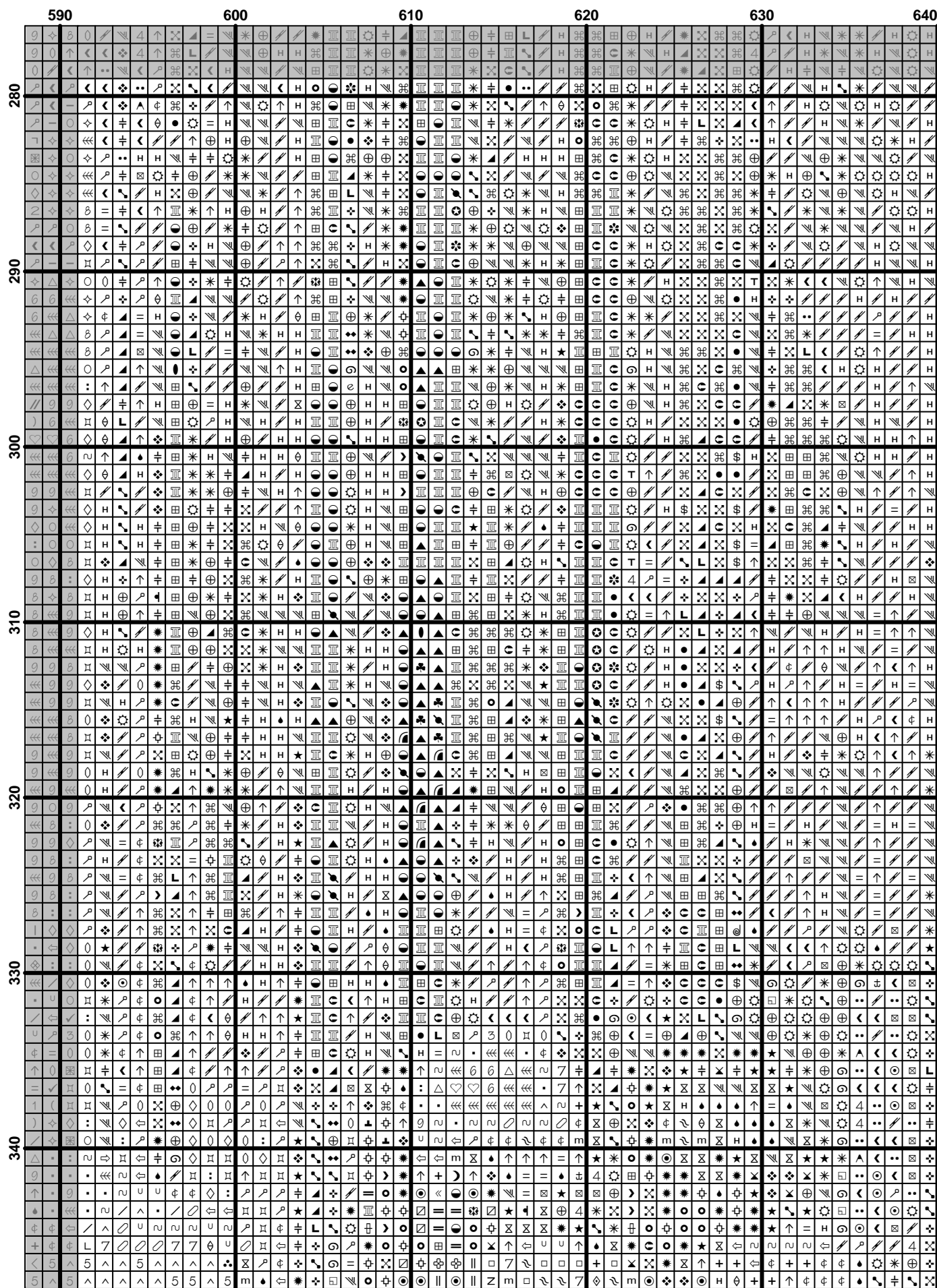
	350	360	370	380	390
280
290
300
310
320
330
340

(109) (110)

(110) (111)

(112)

[illegible]



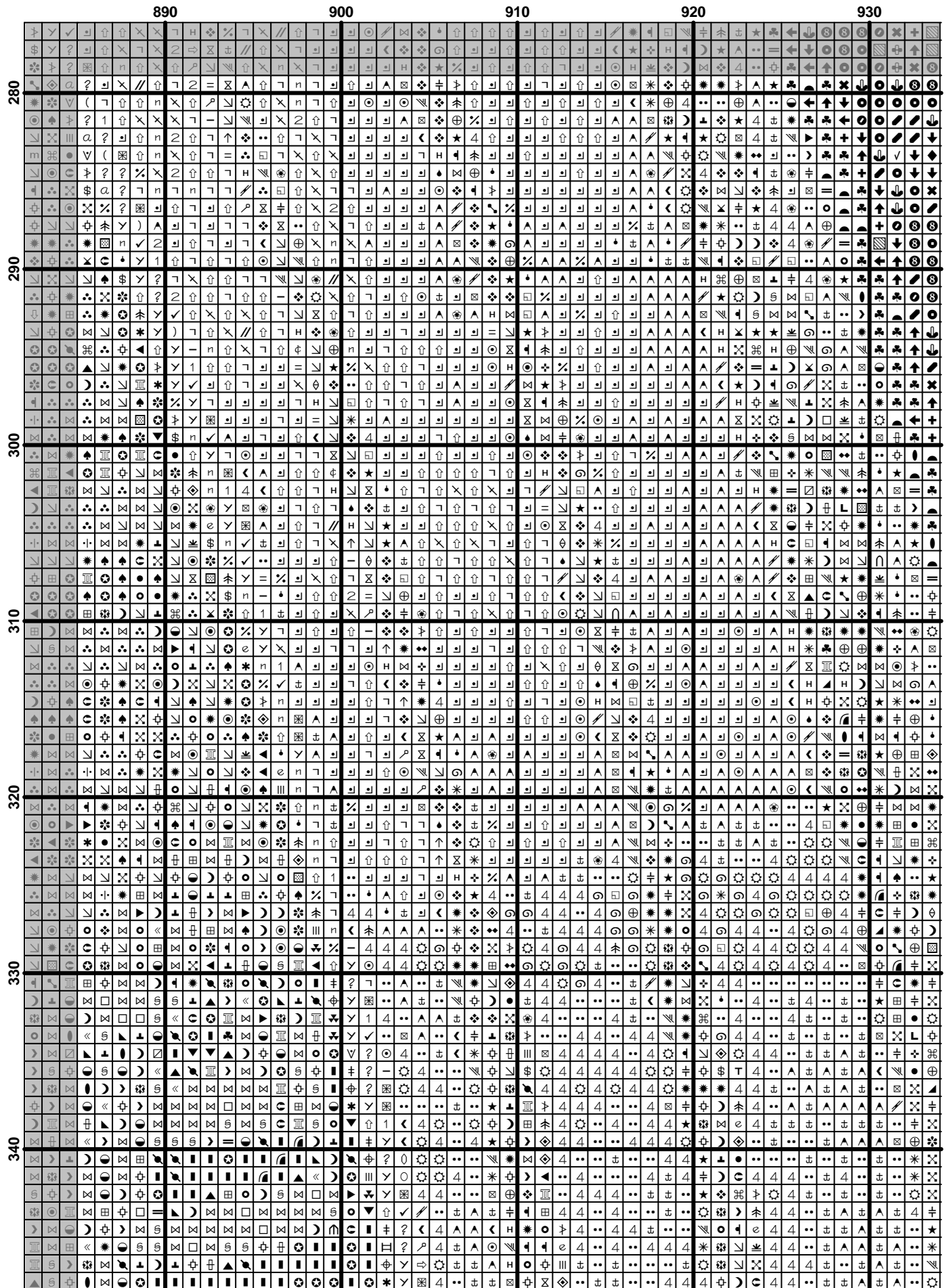
	640	650	660	670	680
280
290
300
310
320
330
340

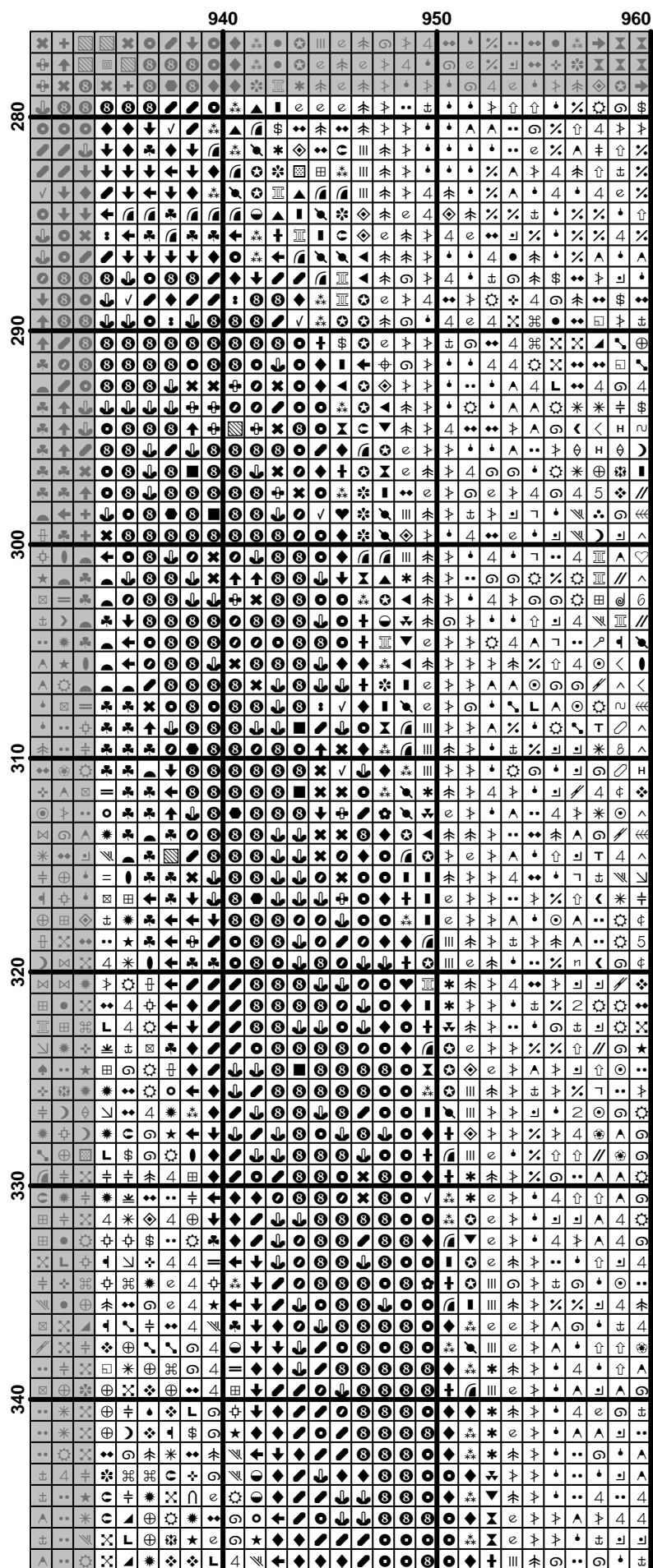
(116)

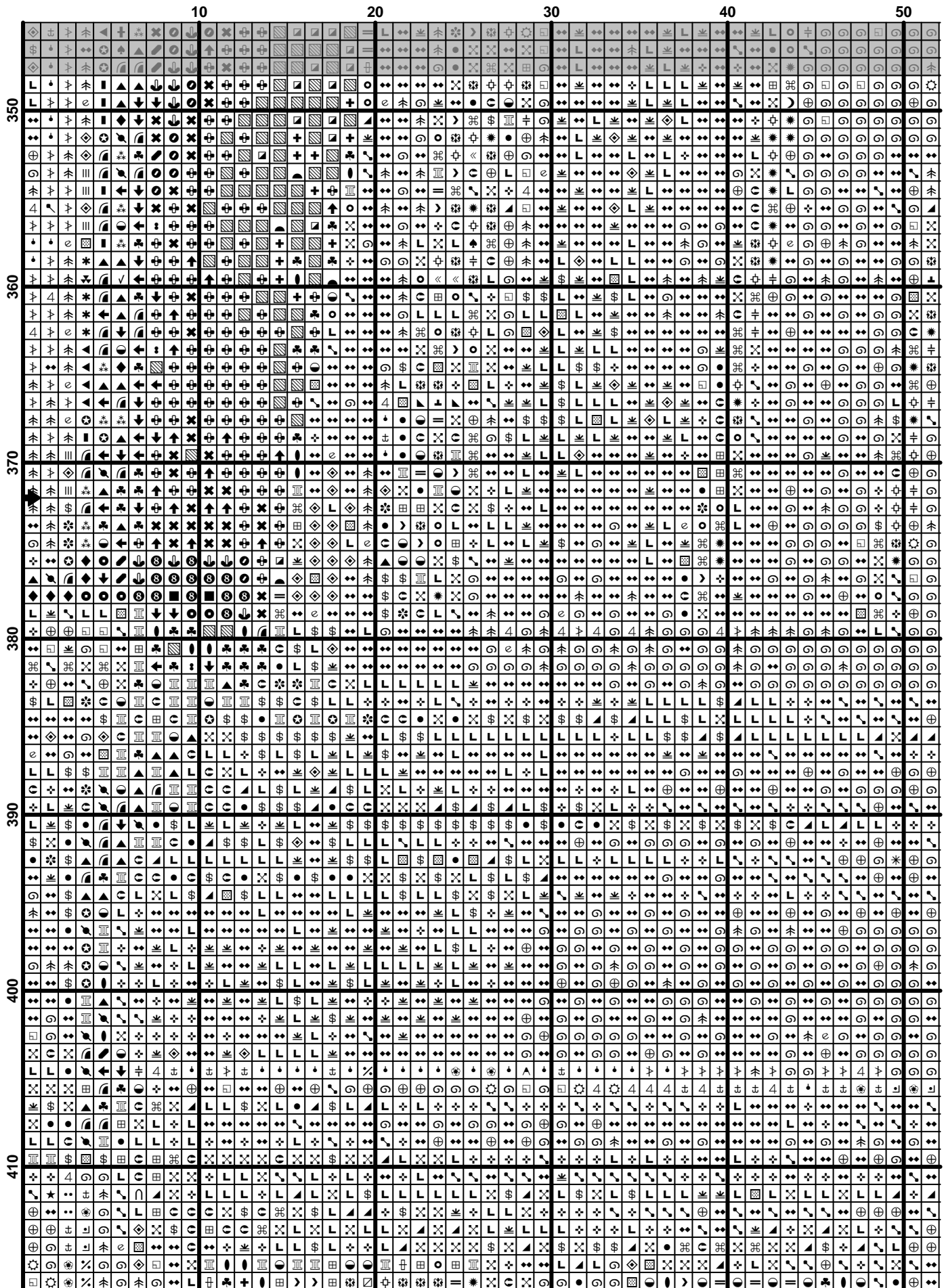
(117)

(118)

(119)







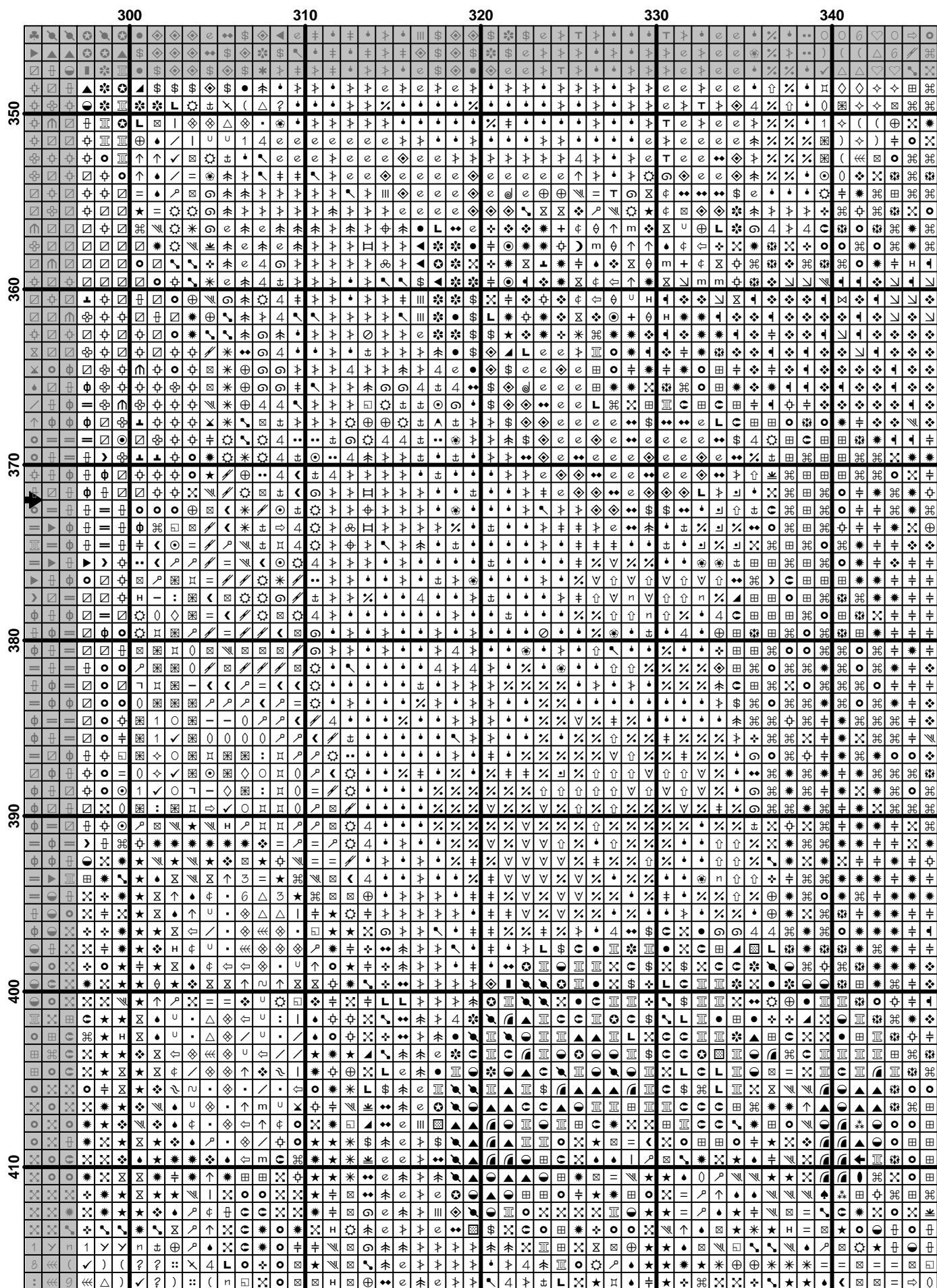
(123)

(124)

	150	160	170	180	190
350
360
370
380
390
400
410

(126)

(127)

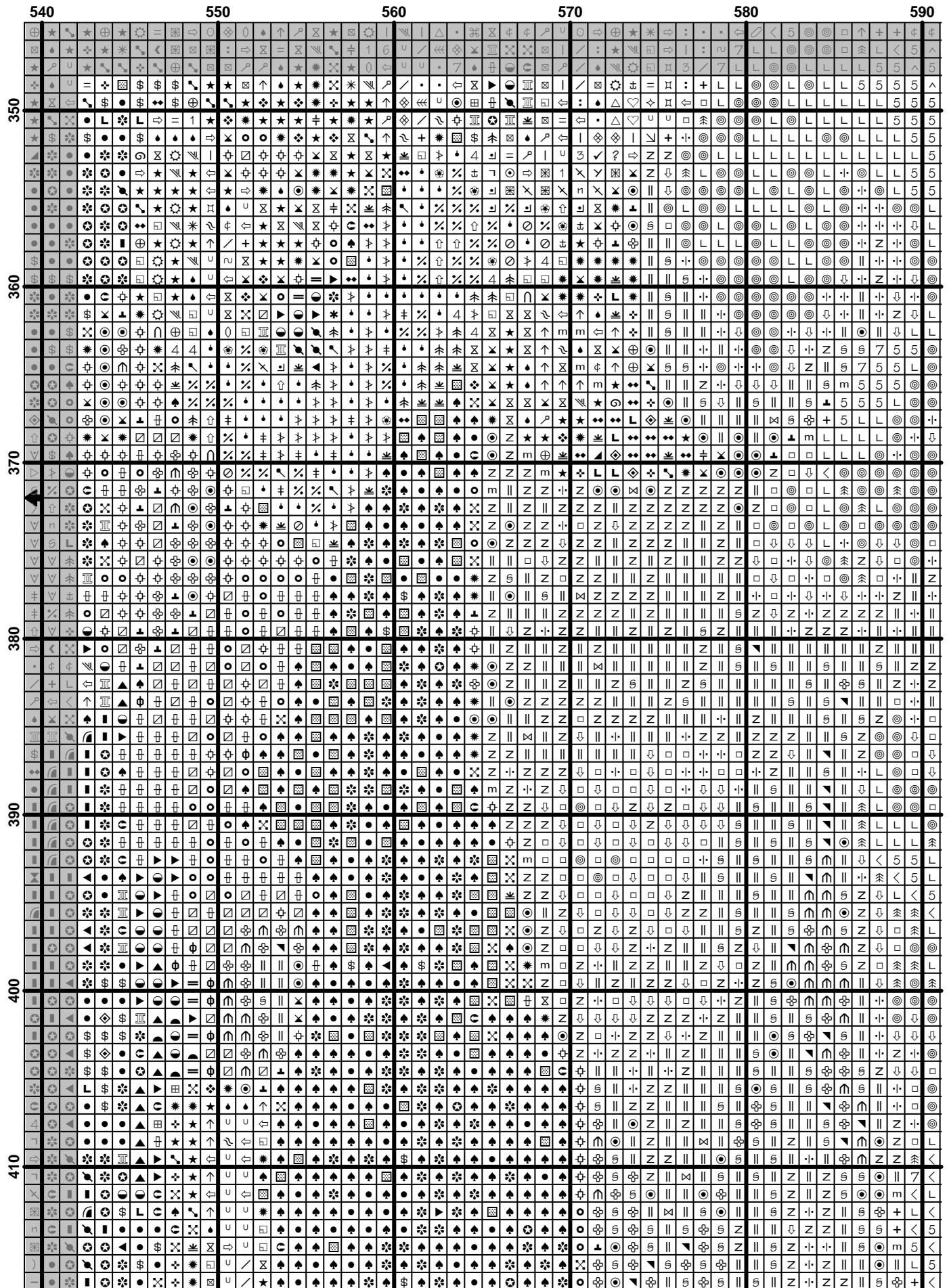


(129)

$$(129) \quad \text{[The text of equation (129) is not visible in the provided image snippet]} \quad (130)$$

$$(130) \quad \text{[The text of equation (130) is illegible]} \quad (131)$$

$$(131) \quad \text{[...]} \quad (132)$$



(134)

(135)

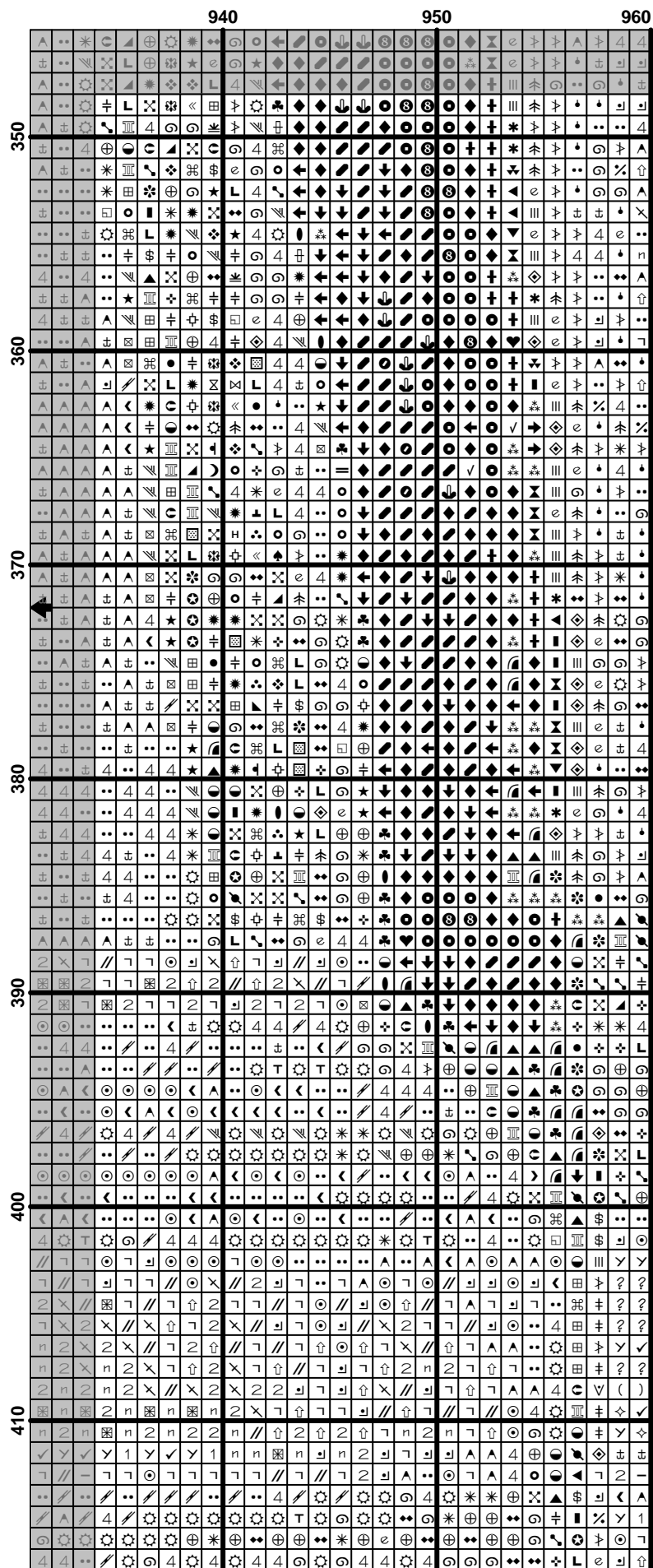
$$(135) \quad \text{[The following is a special case of (136) with } \alpha = 1 \text{ and } \beta = 0.]$$

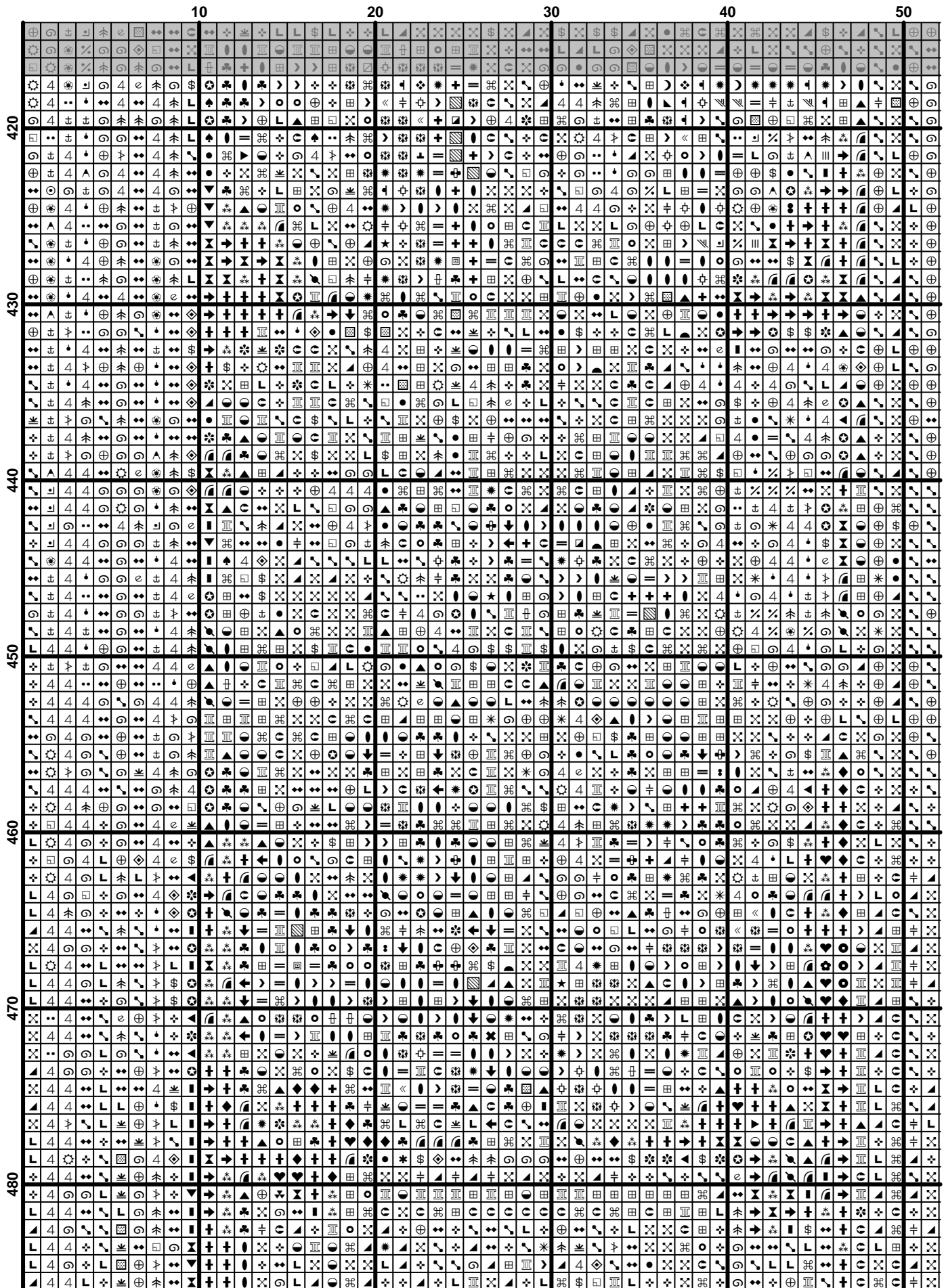
(137)

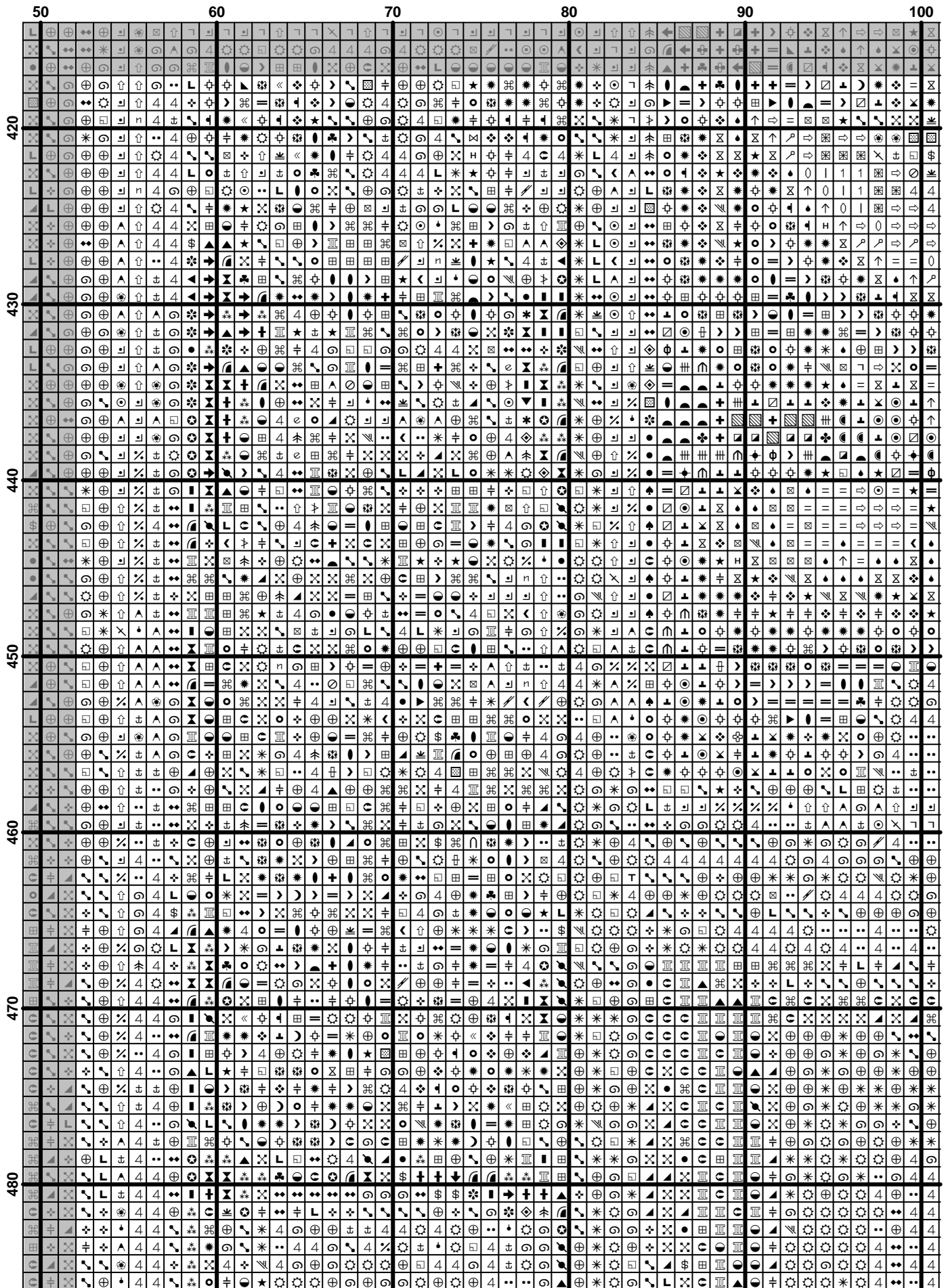
$$(137) \quad \text{[...]} \quad (138)$$

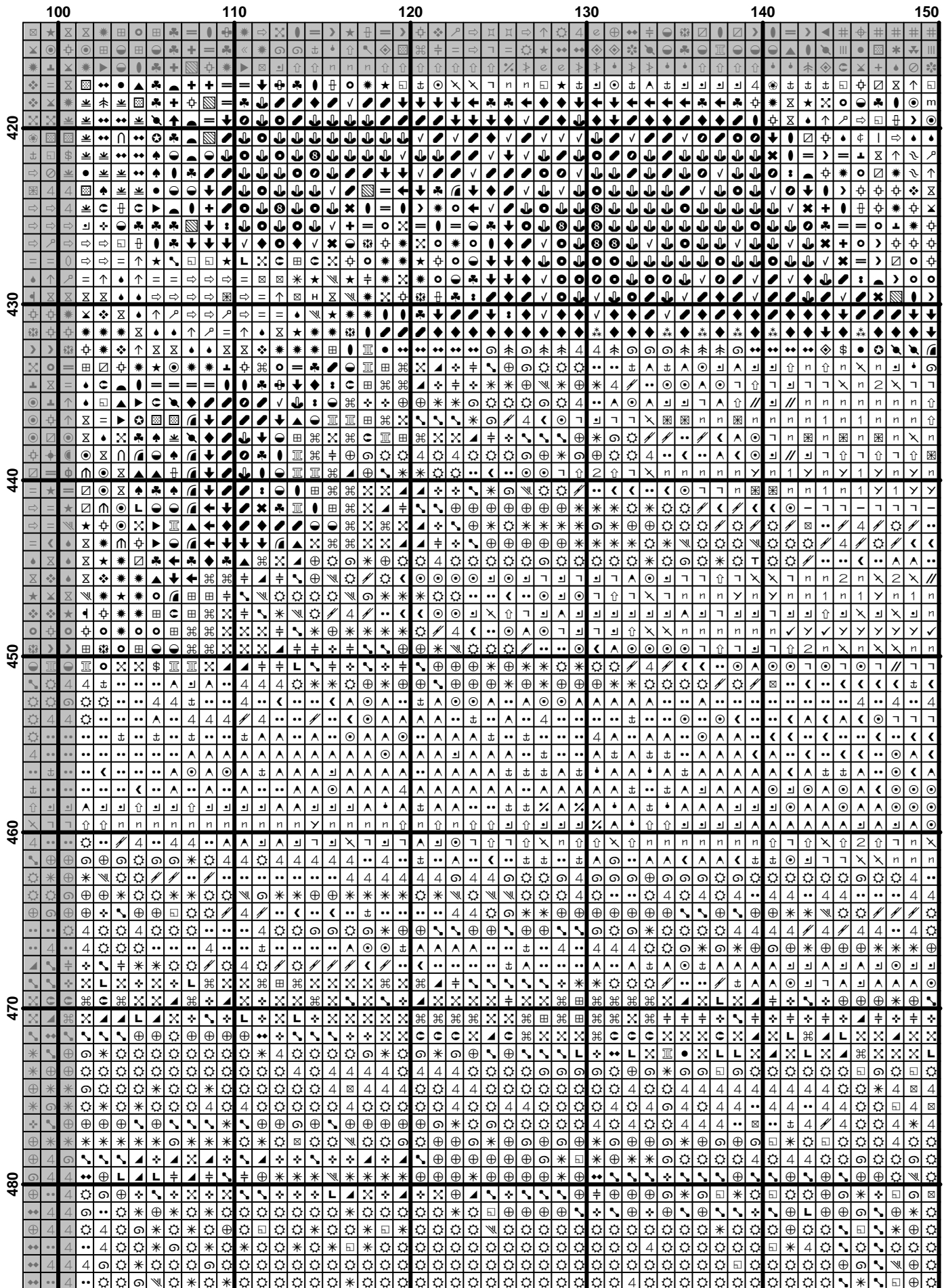
(139)

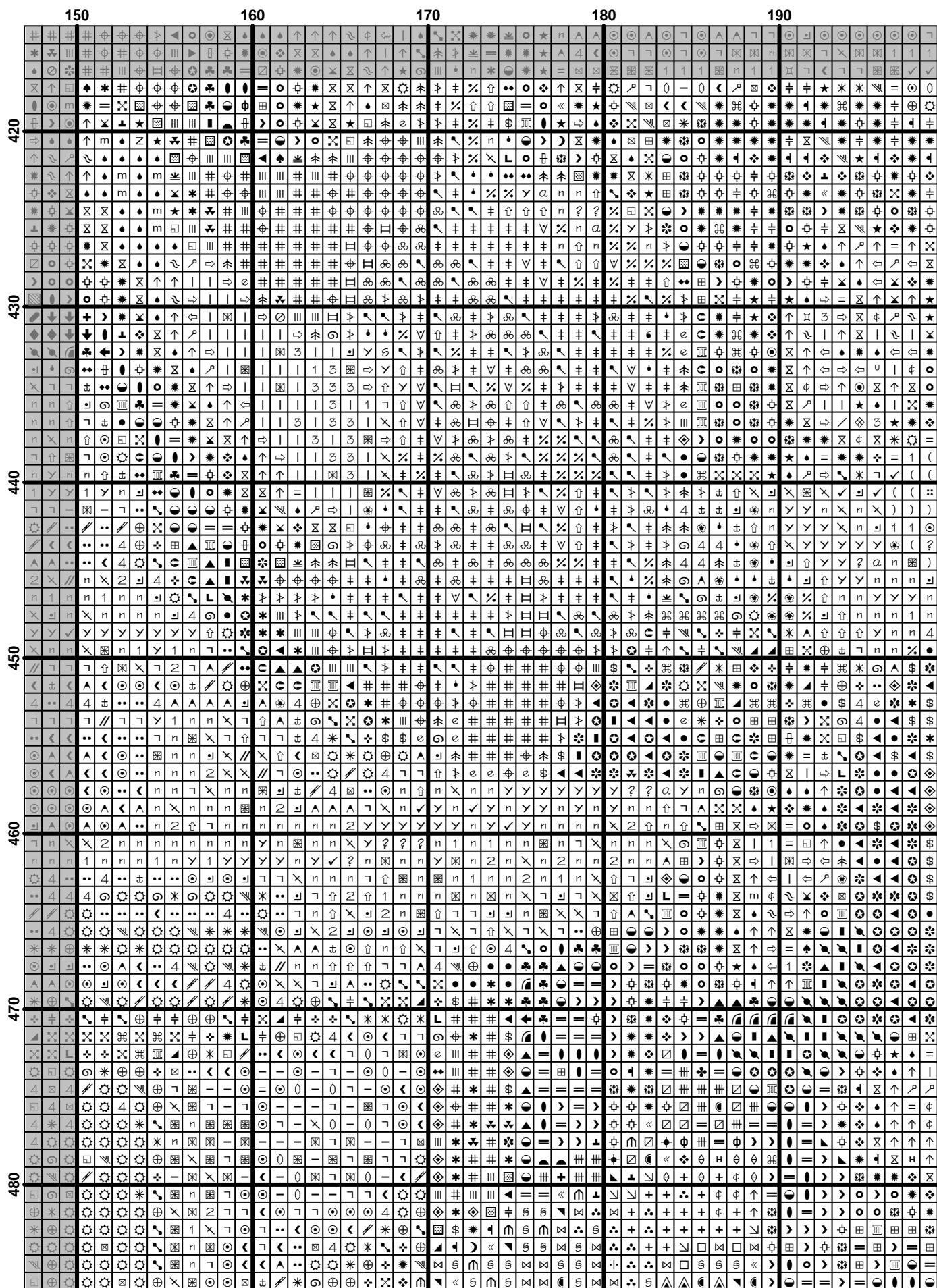
	890	900	910	920	930
350
360
370
380
390
400
410











$$(145) \quad \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \text{ is a } \langle \text{N} \rangle \text{.} \quad (146)$$

	250	260	270	280	290
420	↑	↑	↑	↑	↑
430	↑	↑	↑	↑	↑
440	↑	↑	↑	↑	↑
450	↑	↑	↑	↑	↑
460	↑	↑	↑	↑	↑
470	↑	↑	↑	↑	↑
480	↑	↑	↑	↑	↑

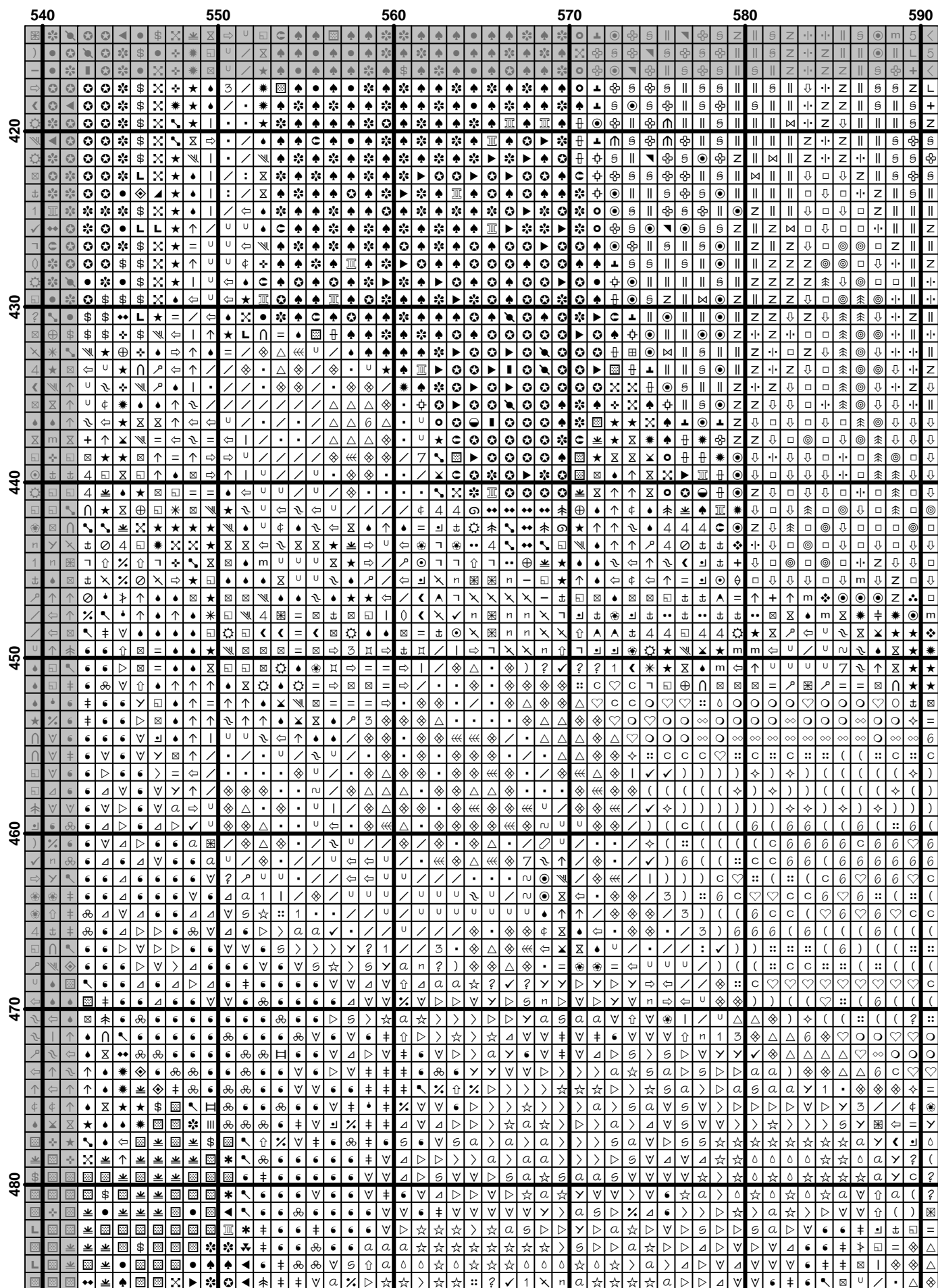
[illegible]

	350	360	370	380	390
420					
430					
440					
450					
460					
470					
480					

	400	410	420	430	440
420
430
440
450
460
470
480

(151)

(152)



$$(153) \quad \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \text{ is a } \langle \text{N} \rangle \text{.} \quad (154)$$

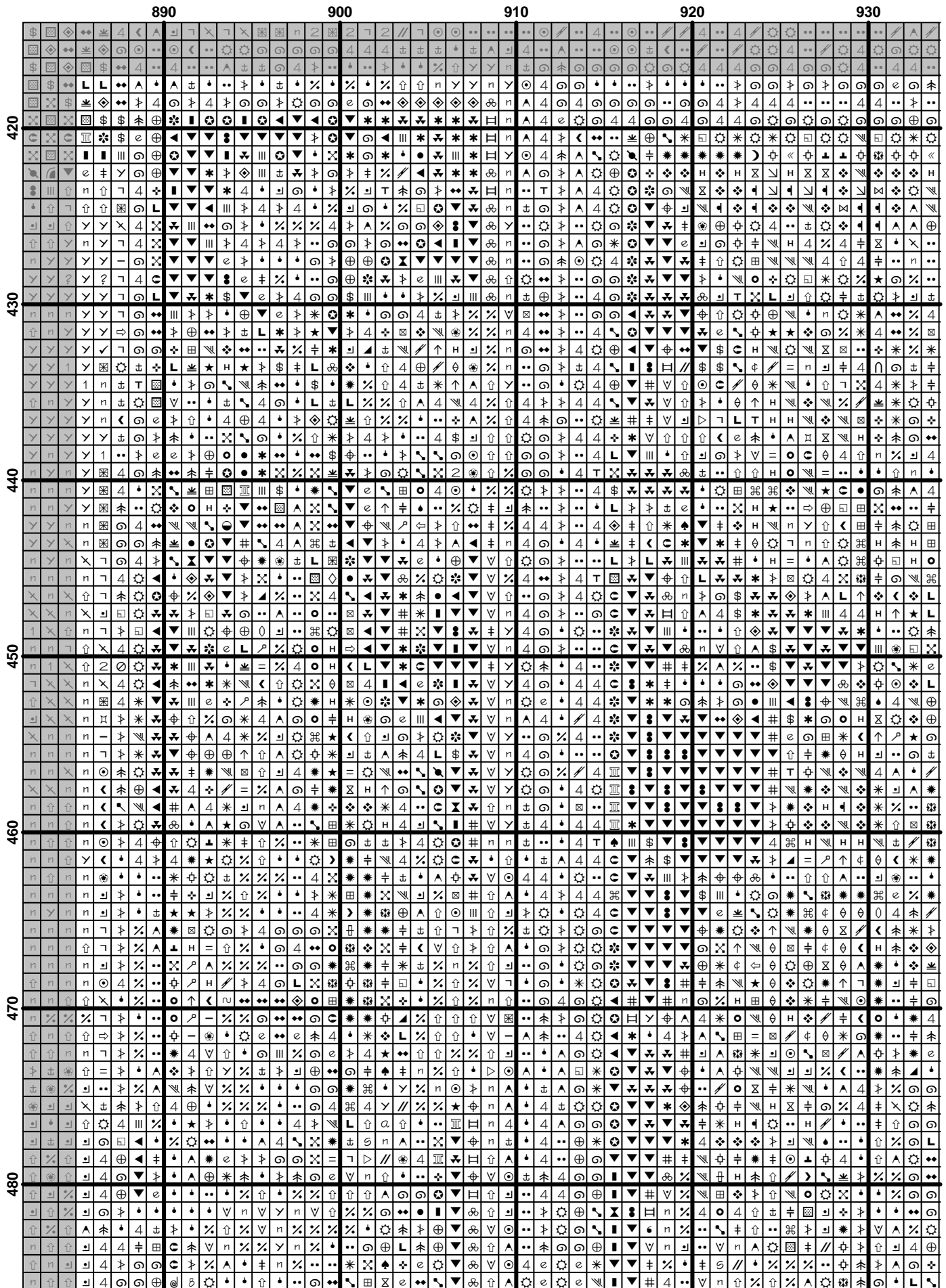
$$(154) \quad \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \text{ is a } \langle \text{N} \rangle \text{.} \quad (155)$$

	690	700	710	720	730
420	↑	↑	↑	↑	↑
430	↑	↑	↑	↑	↑
440	↑	↑	↑	↑	↑
450	↑	↑	↑	↑	↑
460	↑	↑	↑	↑	↑
470	↑	↑	↑	↑	↑
480	↑	↑	↑	↑	↑

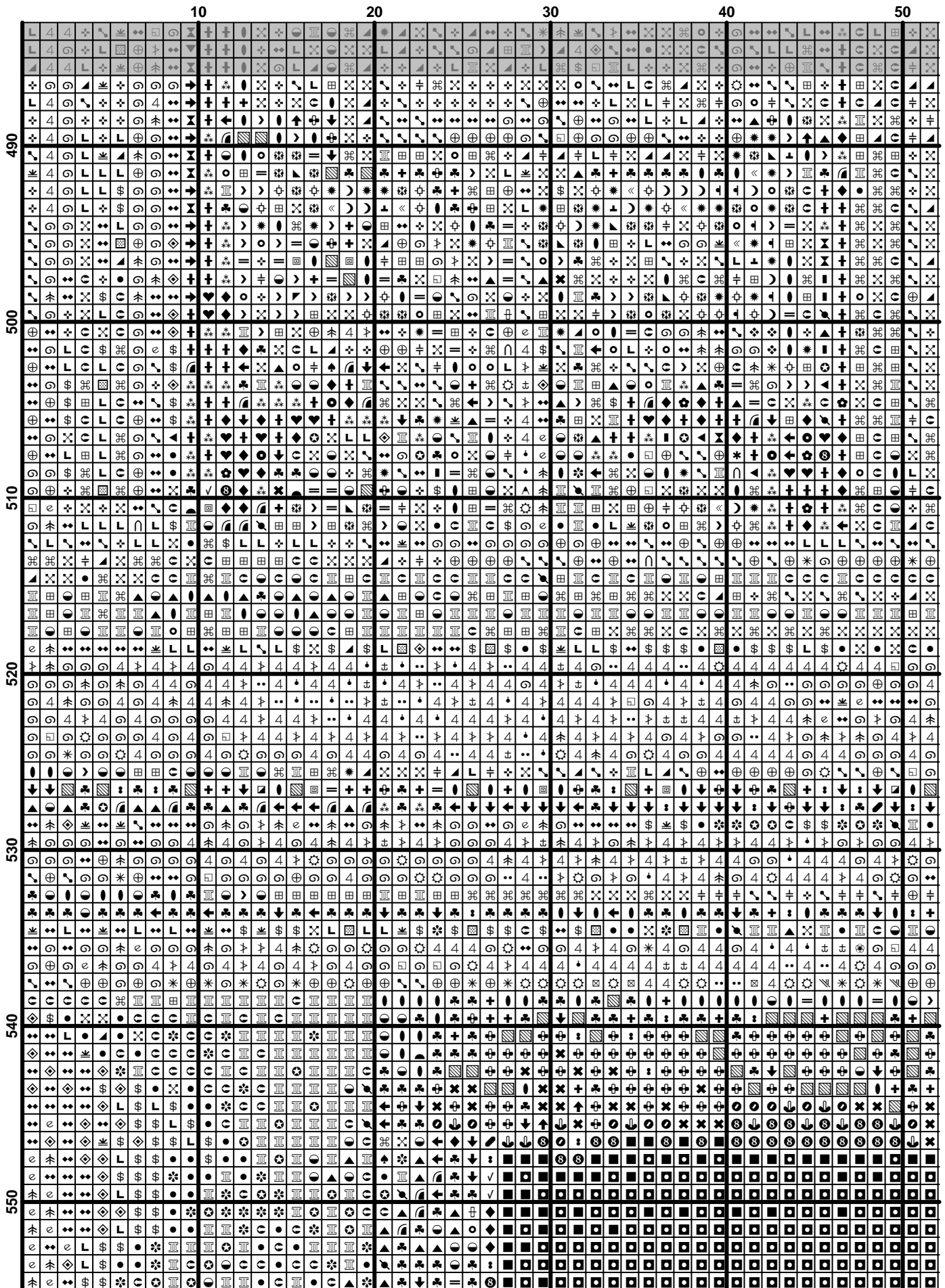
(157)

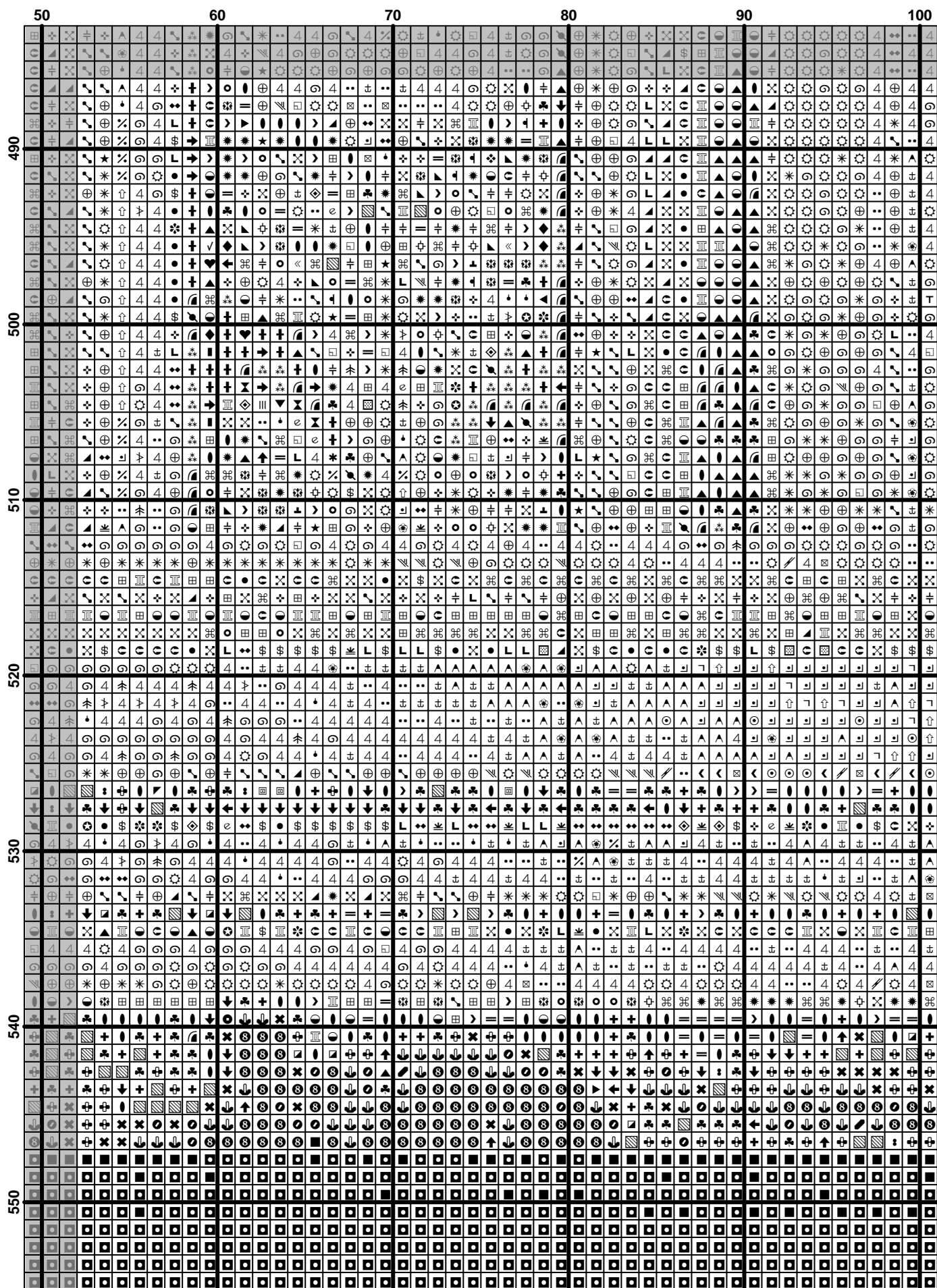
	790	800	810	820	830
420
430
440
450
460
470
480

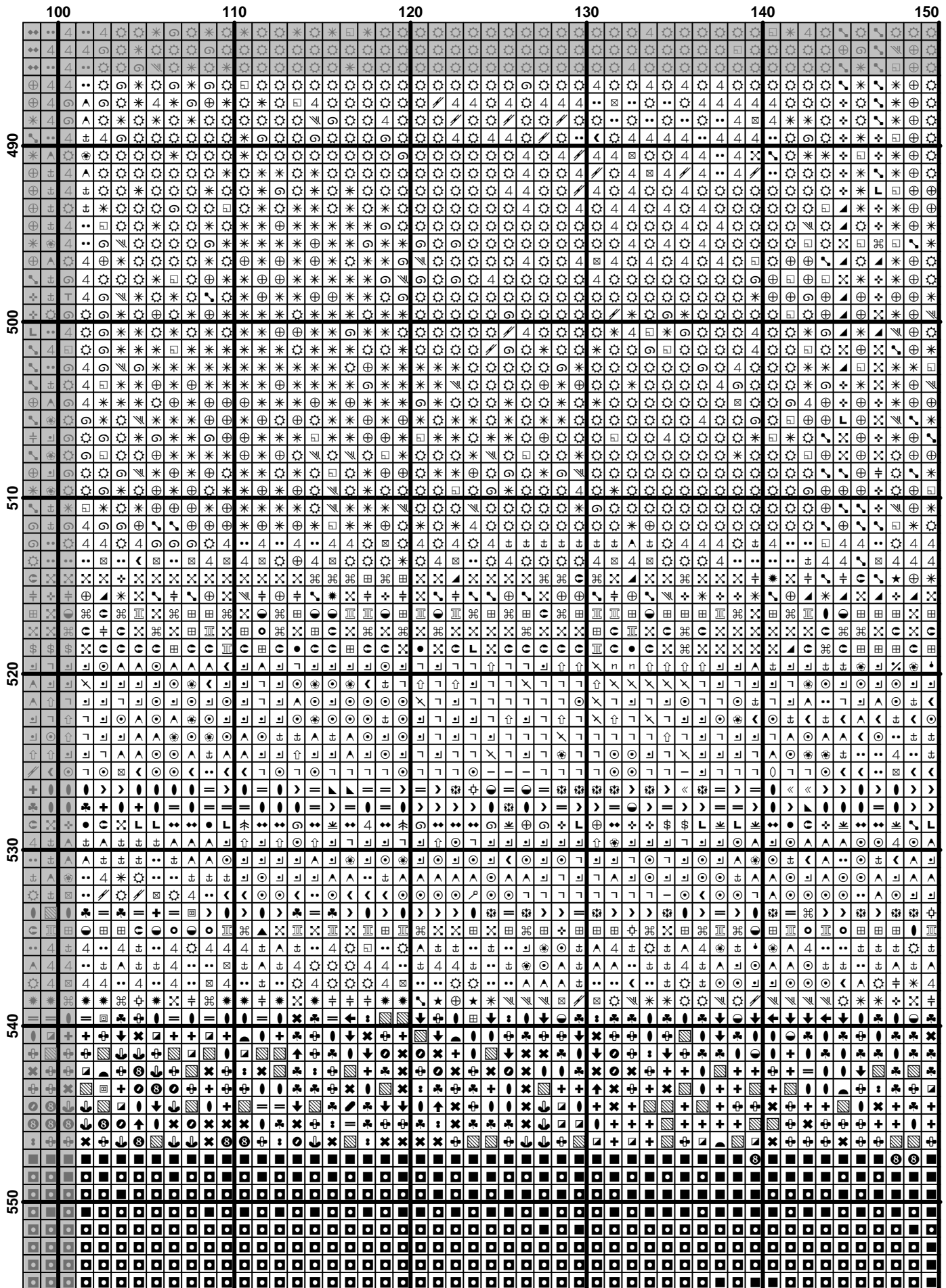
	840	850	860	870	880
420
430
440
450
460
470
480

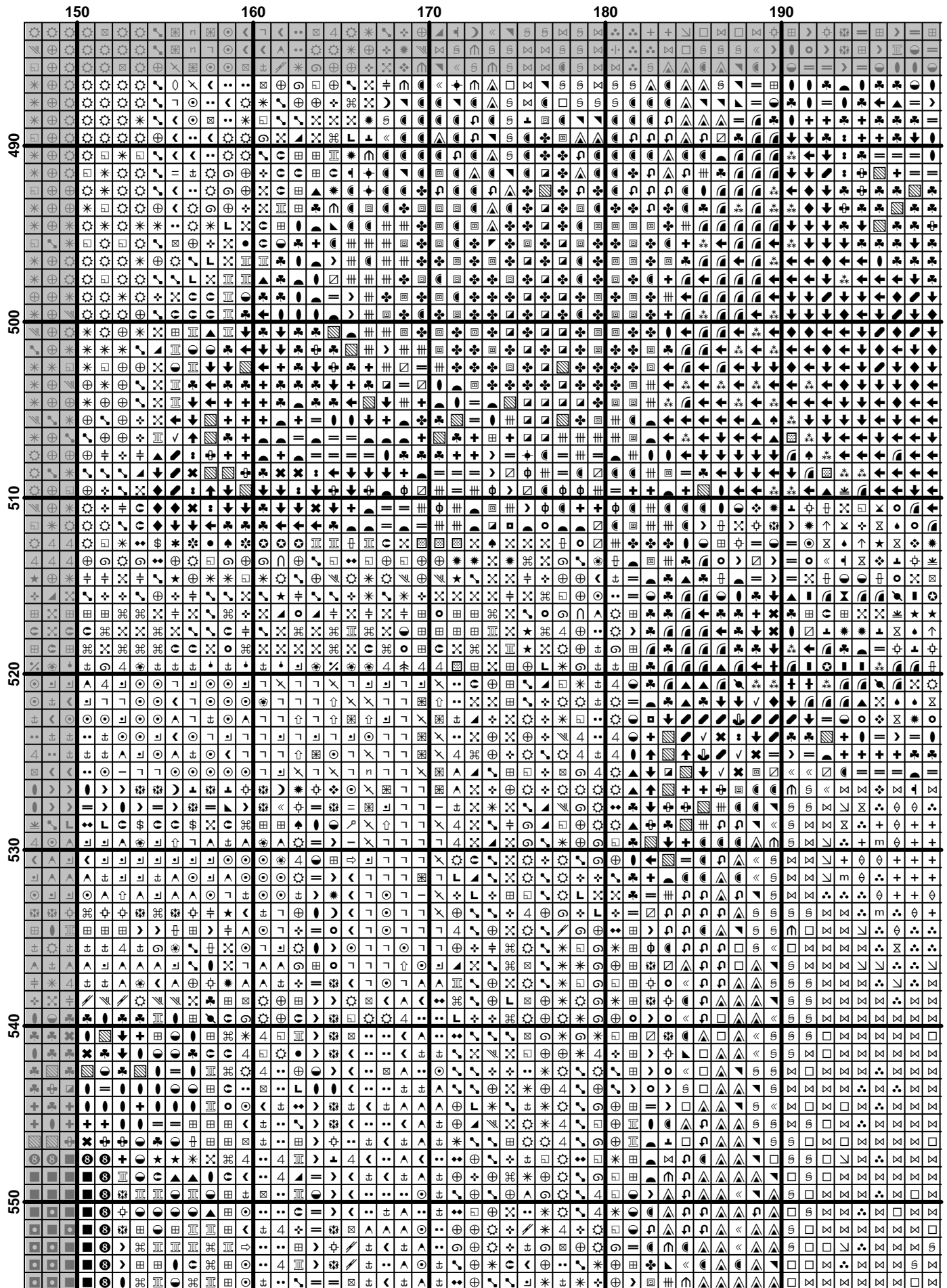


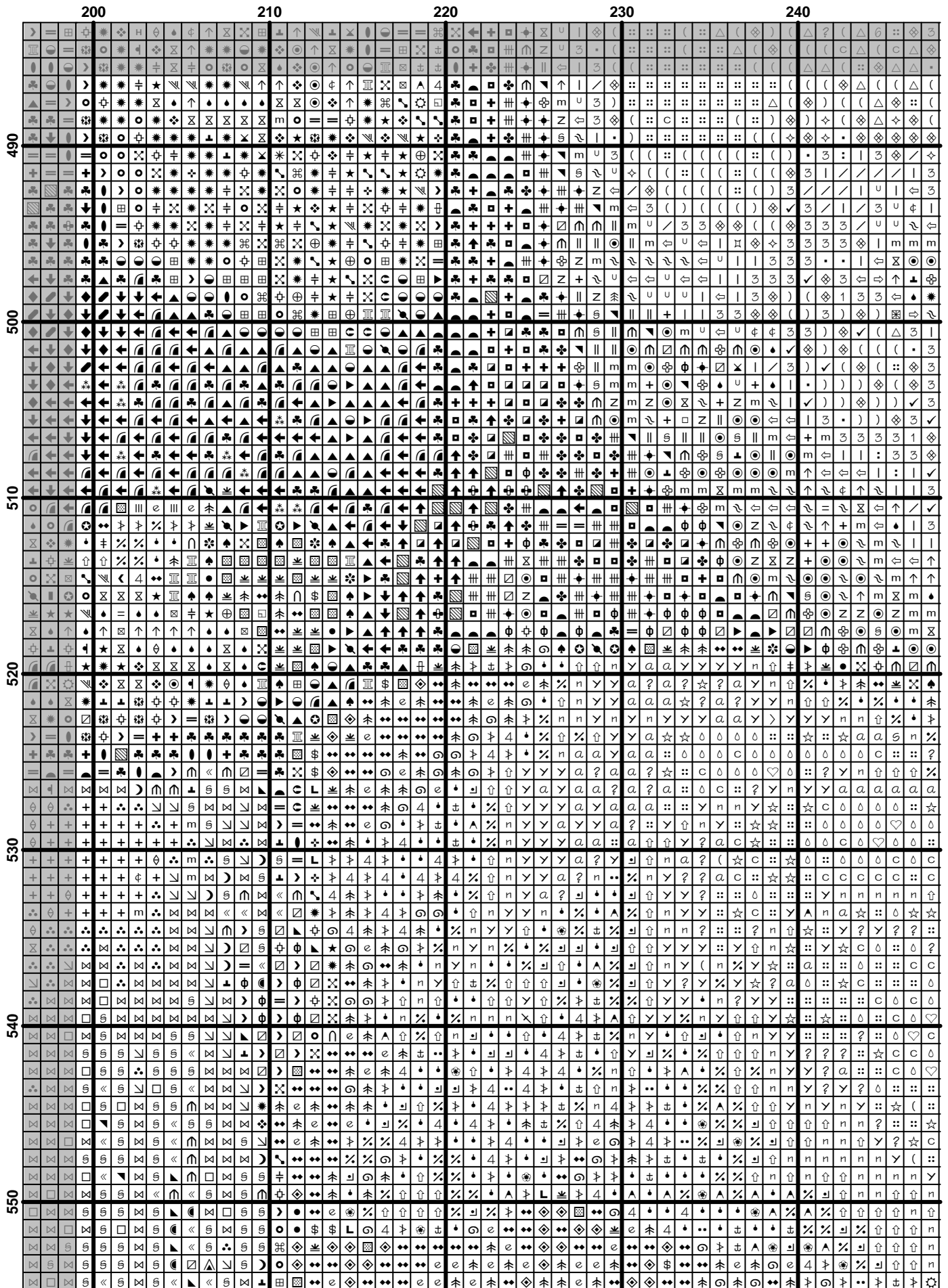
(160)











	250	260	270	280	290
490
500
510
520
530
540
550

	300	310	320	330	340
490					
500					
510					
520					
530					
540					
550					

	350	360	370	380	390
490					
500					
510					
520					
530					
540					
550					

(170)

(171)

(172)

(173)

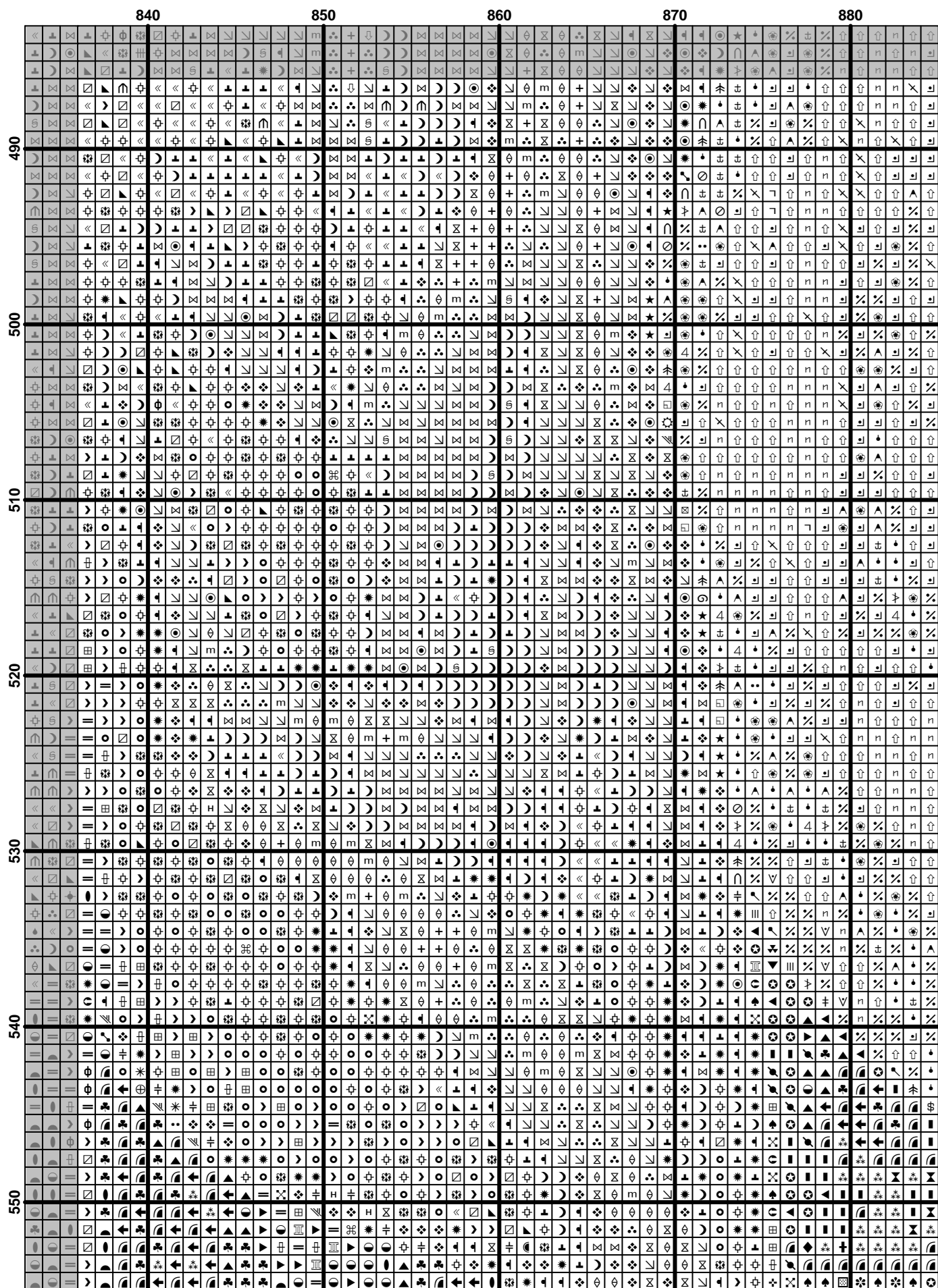
(174)

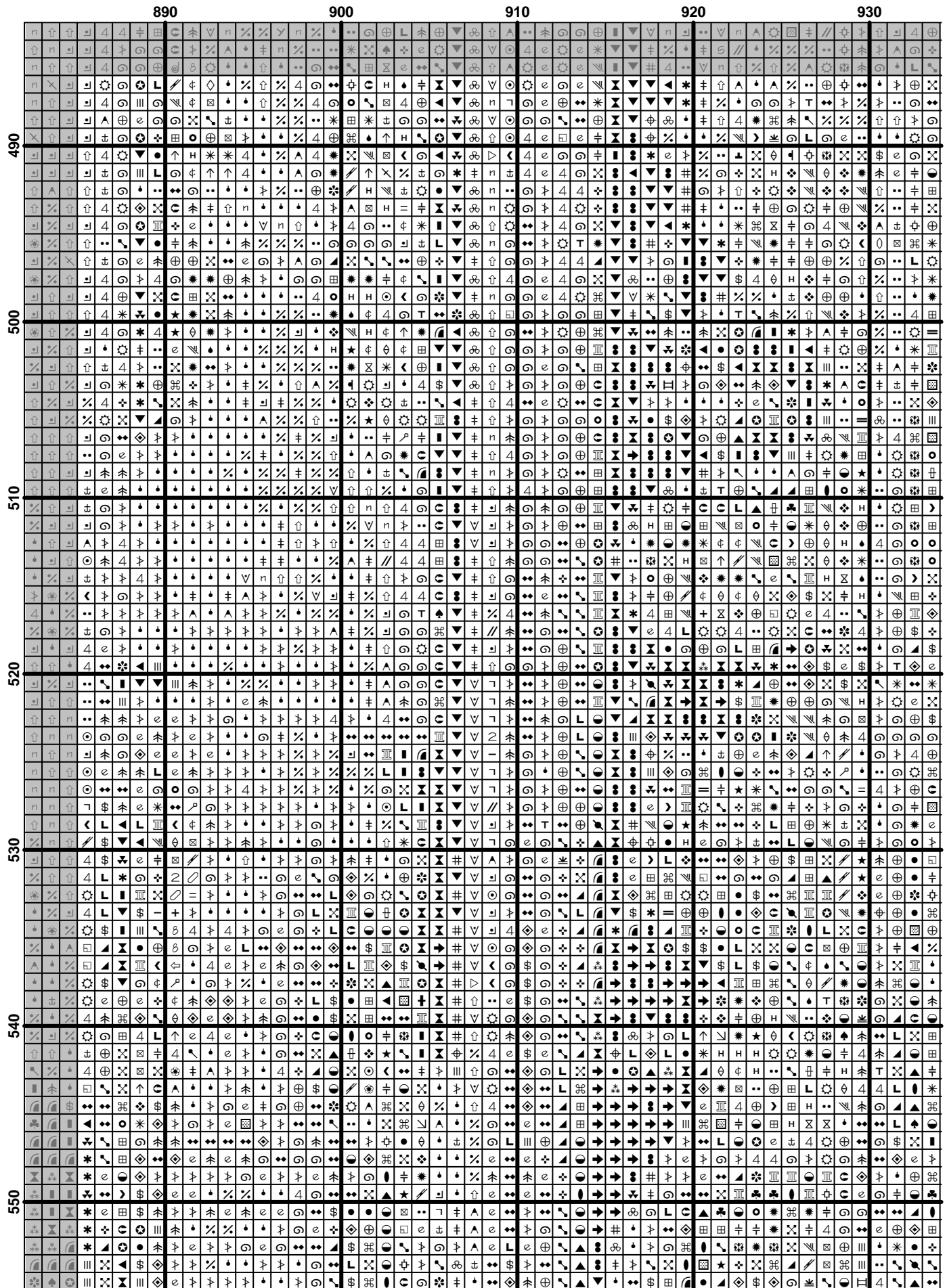
(175)

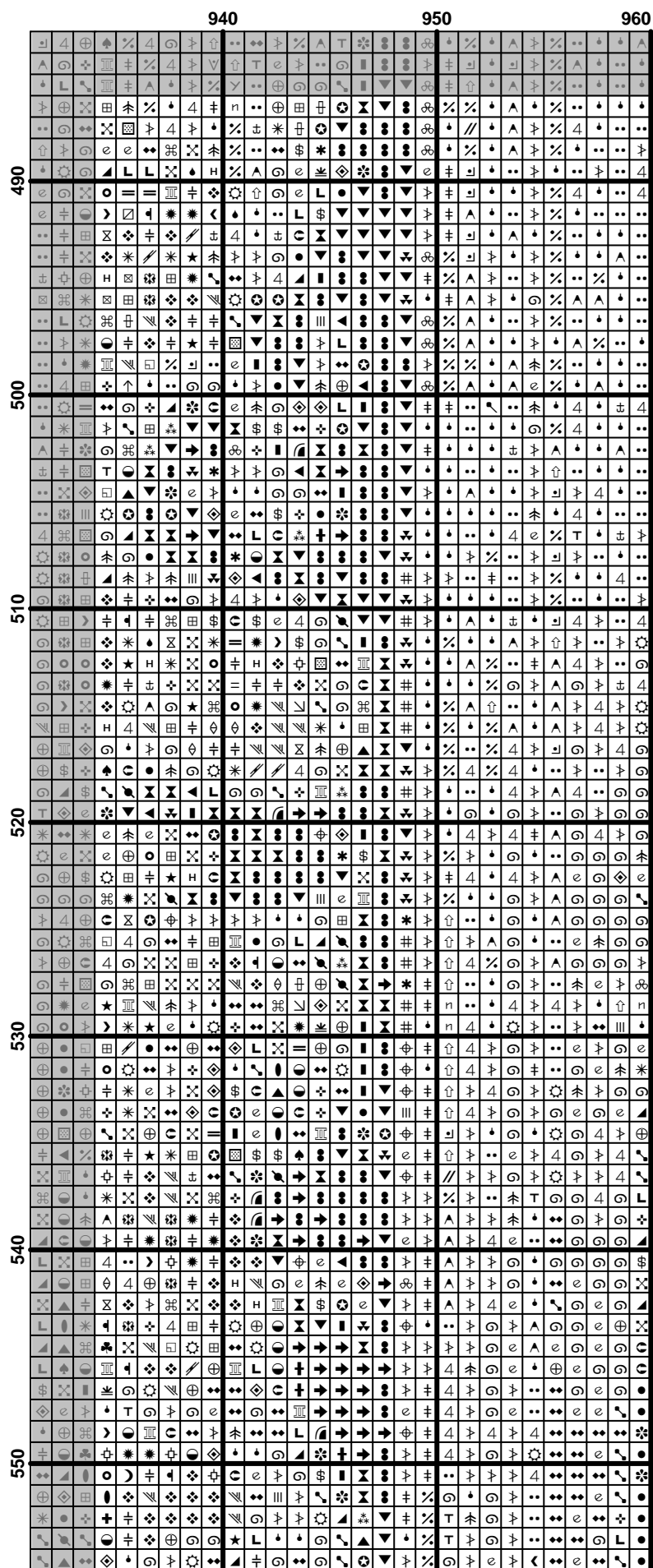
	690	700	710	720	730
490
500
510
520
530
540
550

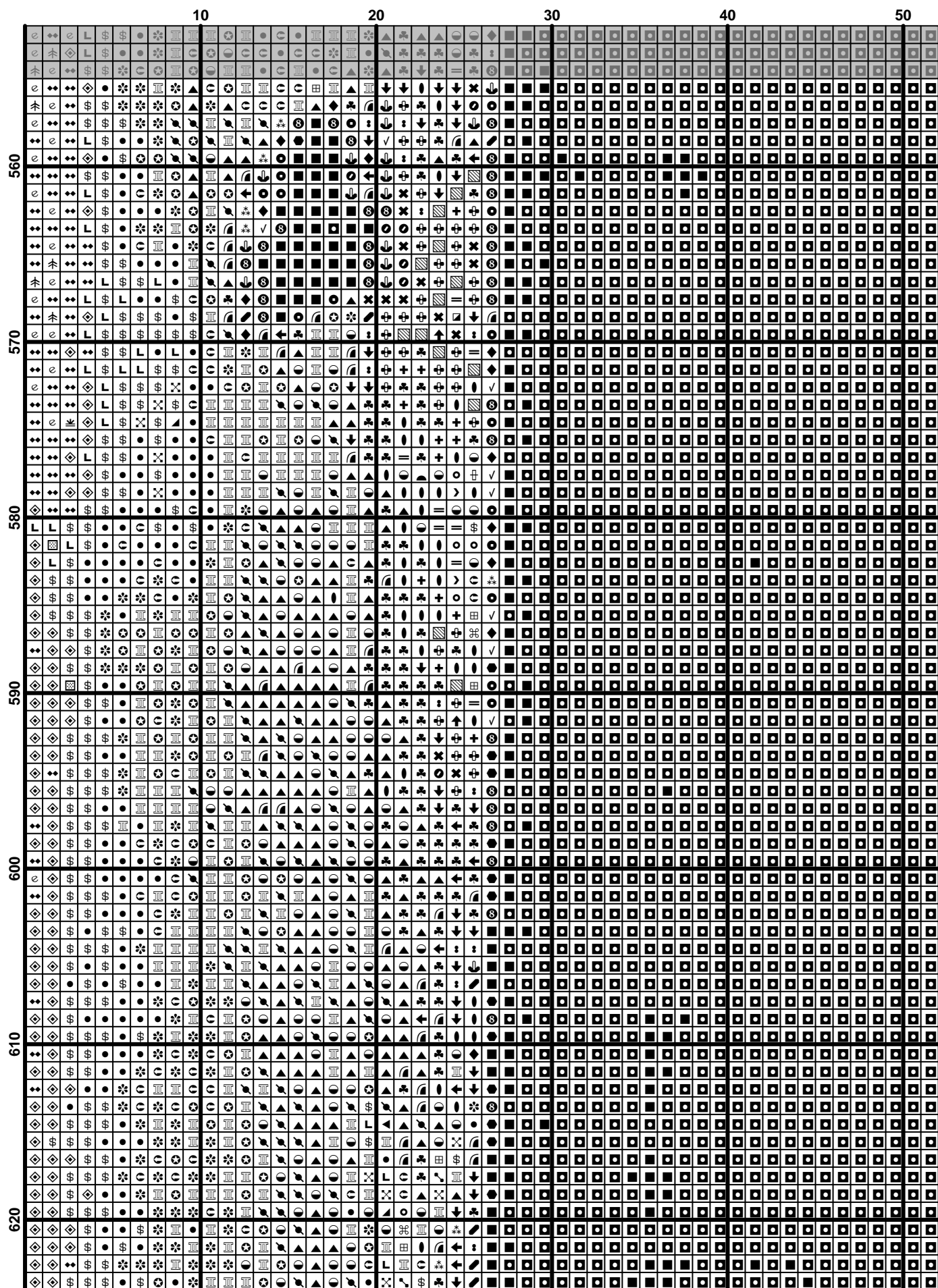
(177)

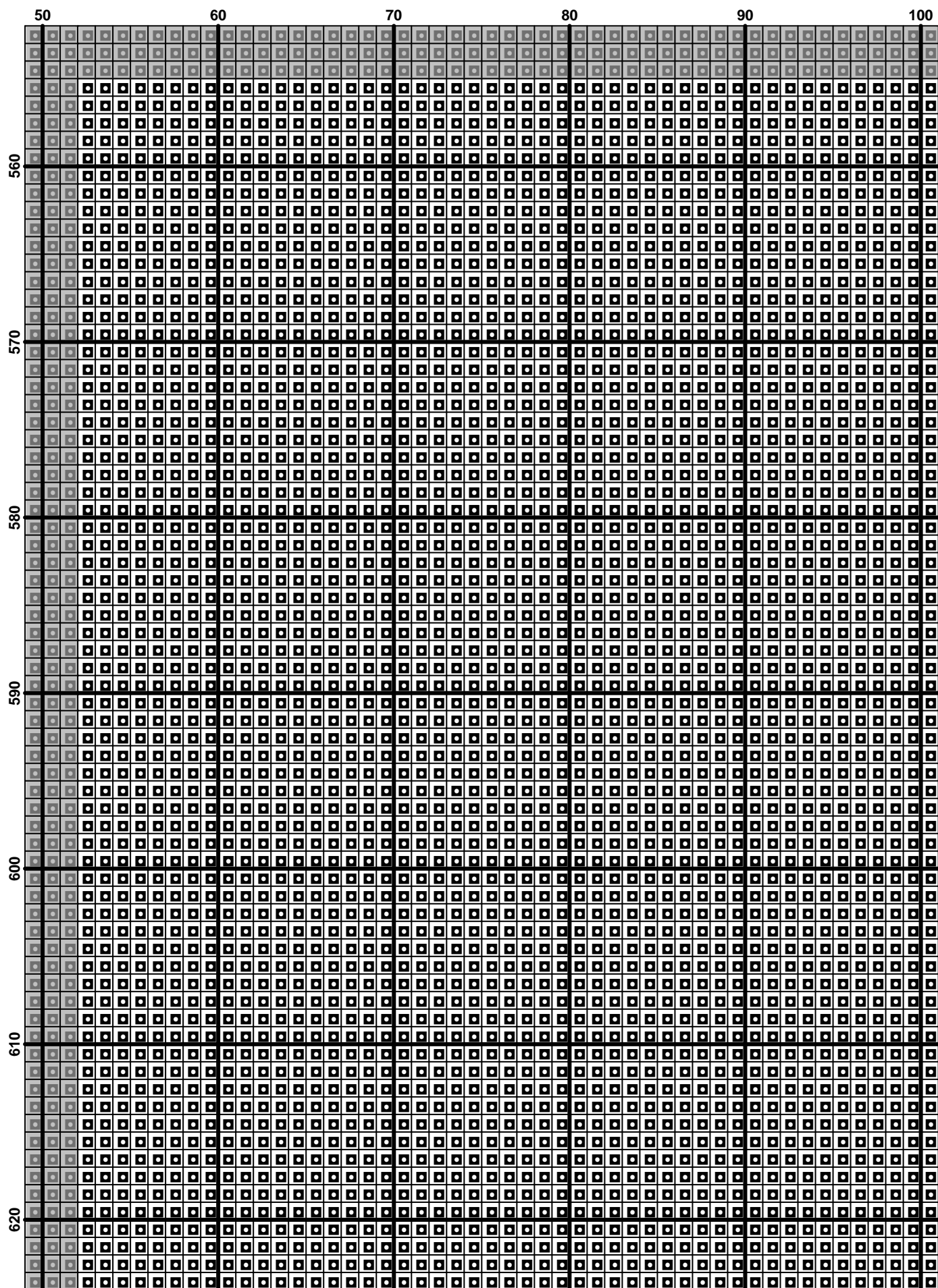


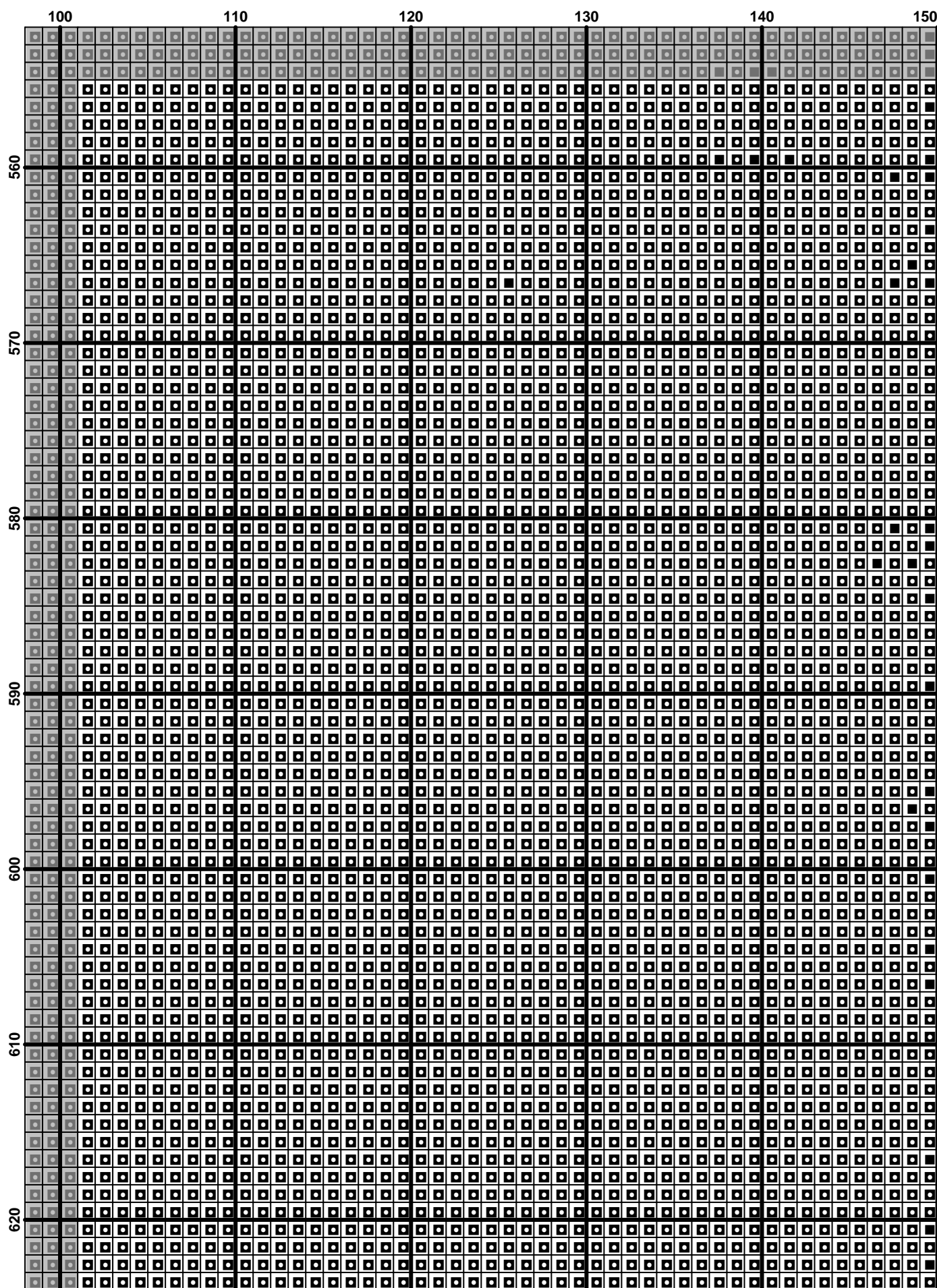


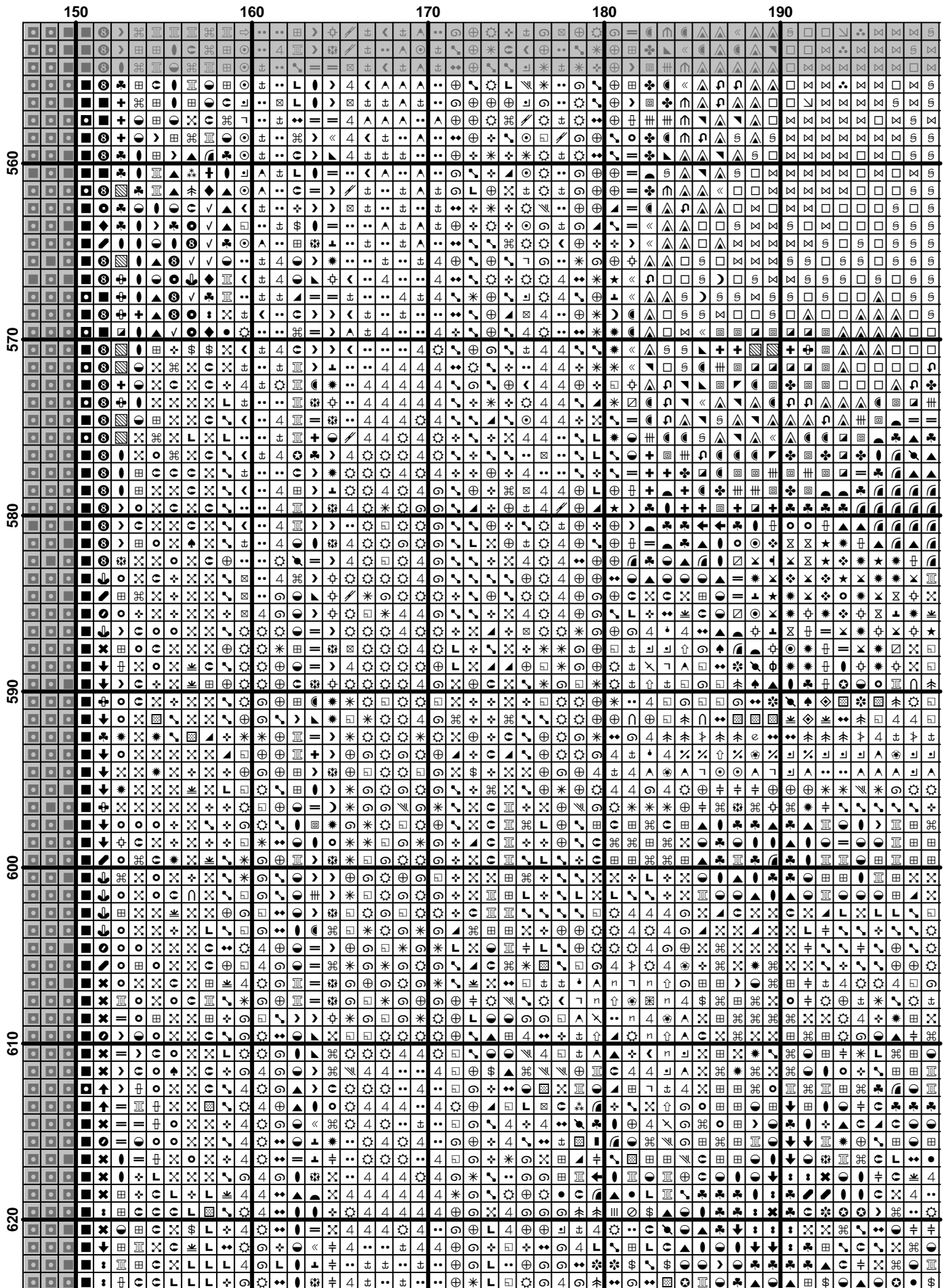










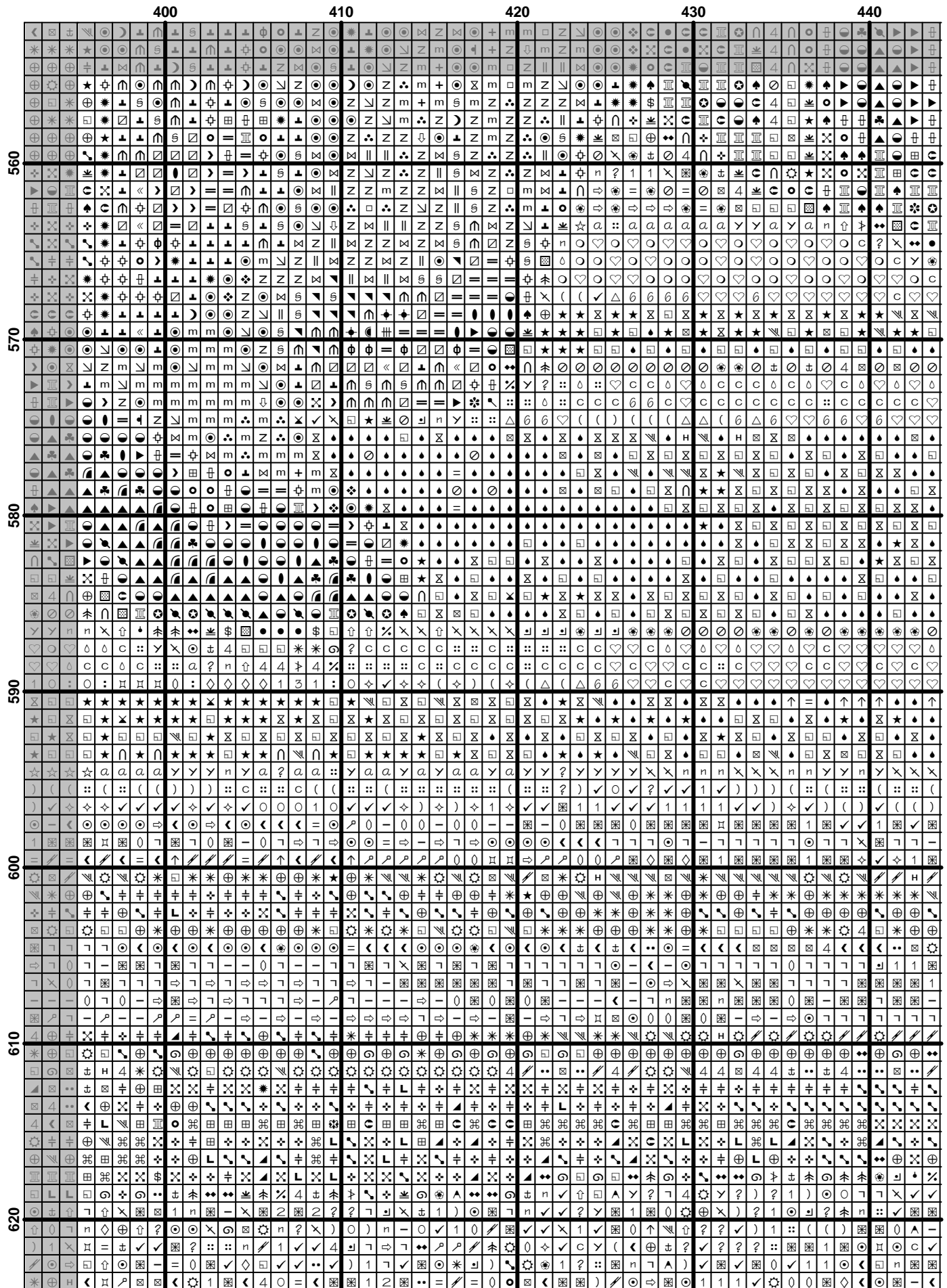


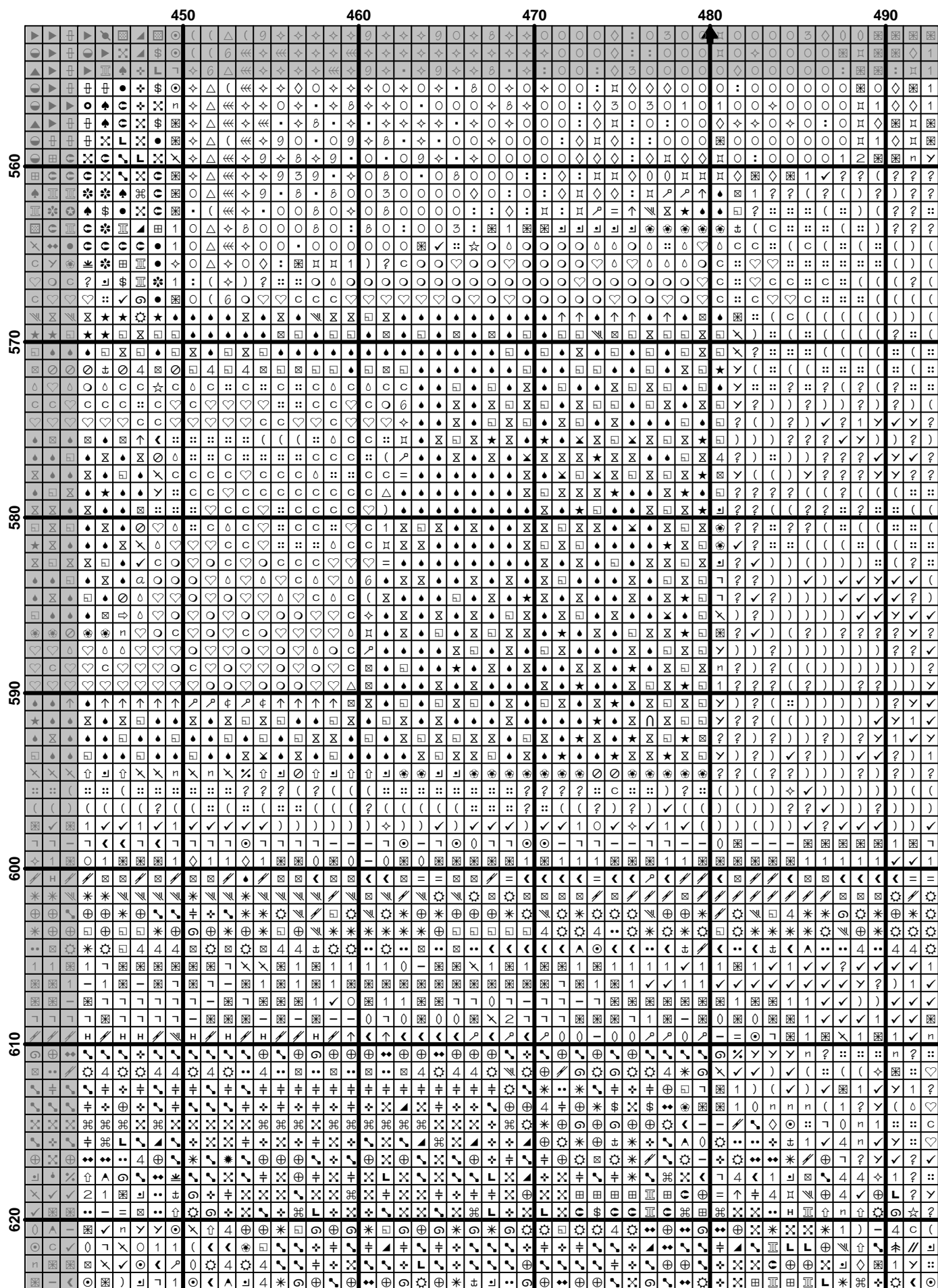
	200	210	220	230	240
560
570
580
590
600
610
620

	250	260	270	280	290
560
570
580
590
600
610
620

	300	310	320	330	340
560
570
580
590
600
610
620

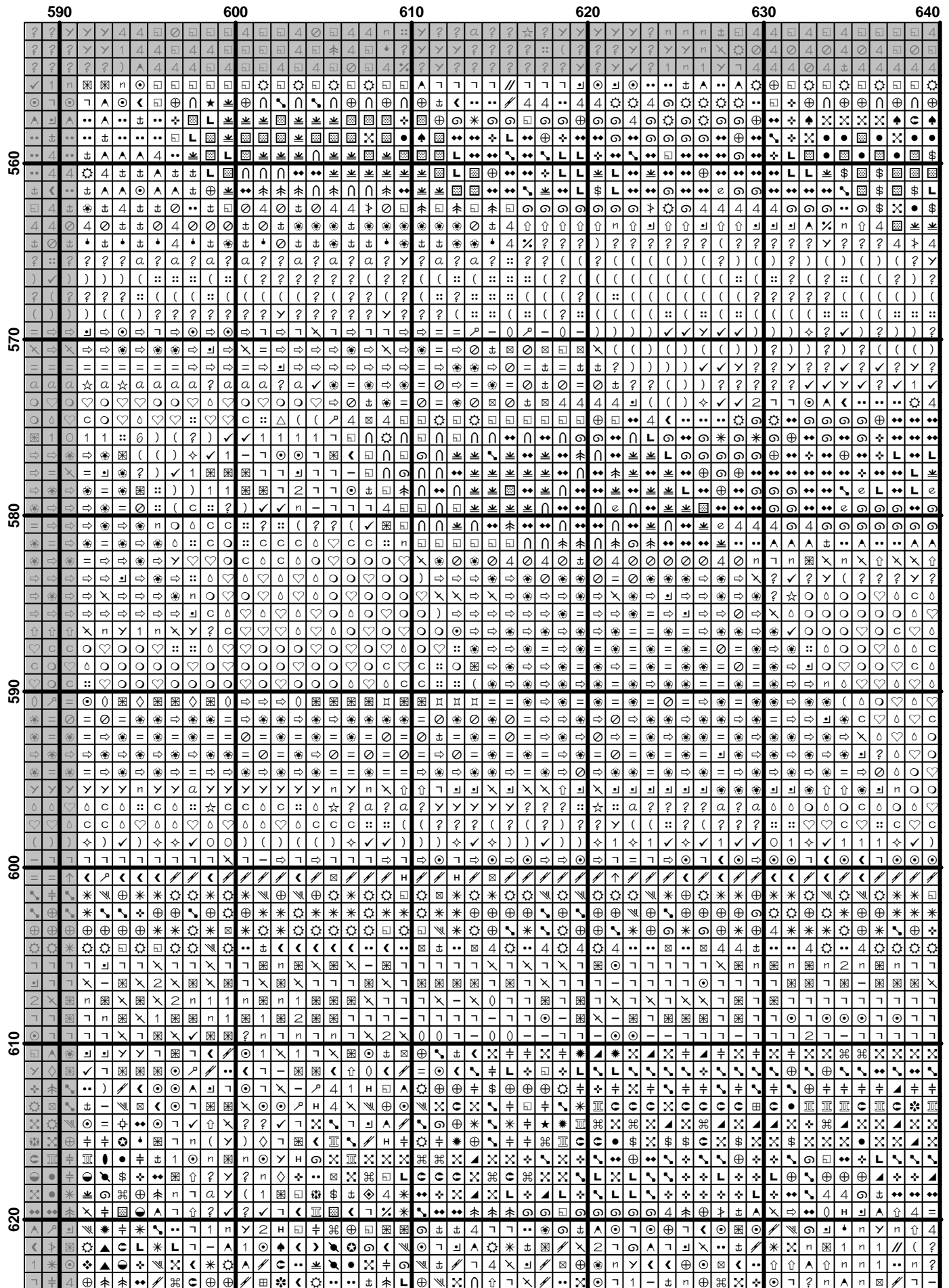
(188) (189)



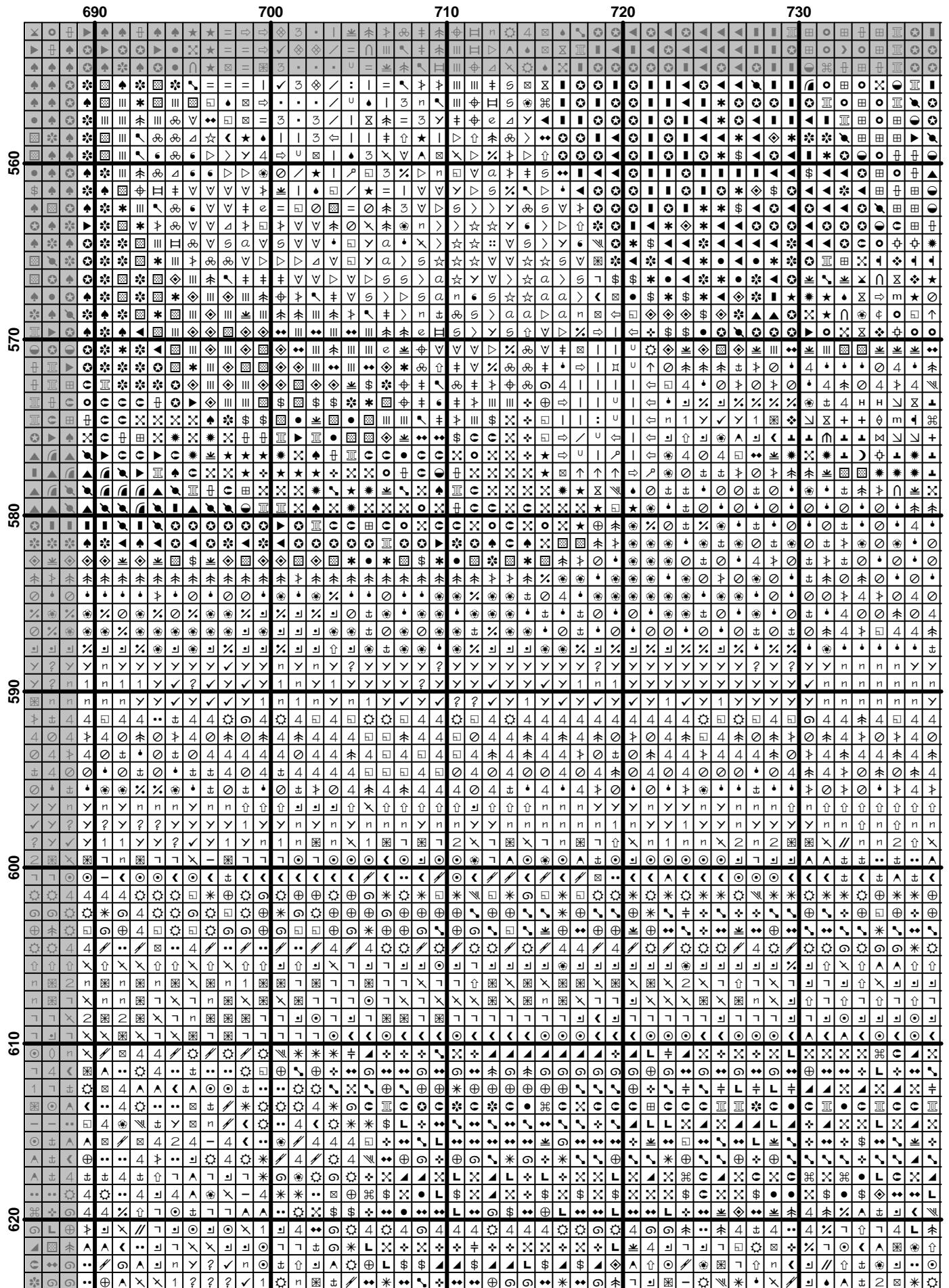


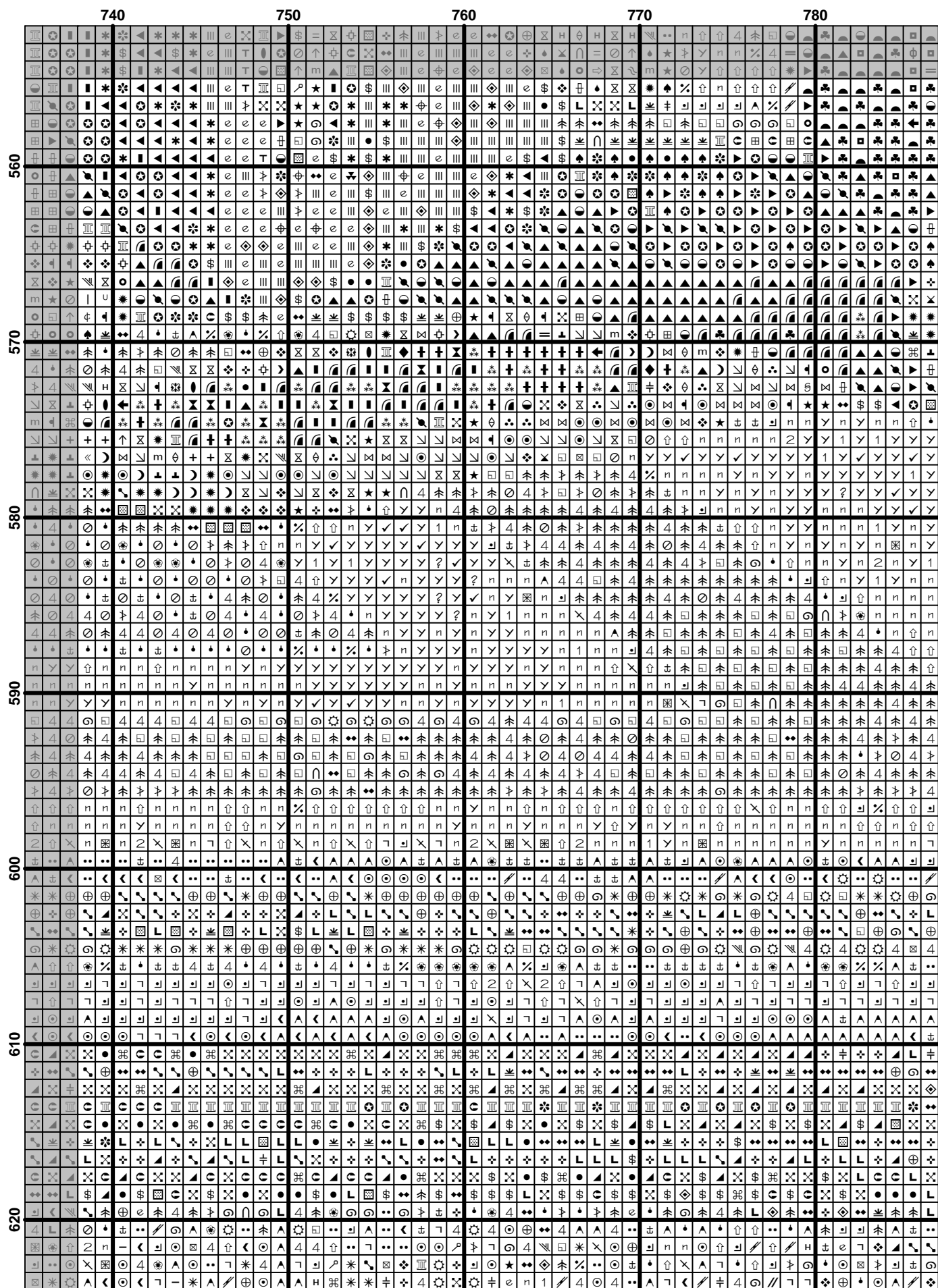
(191) (192)

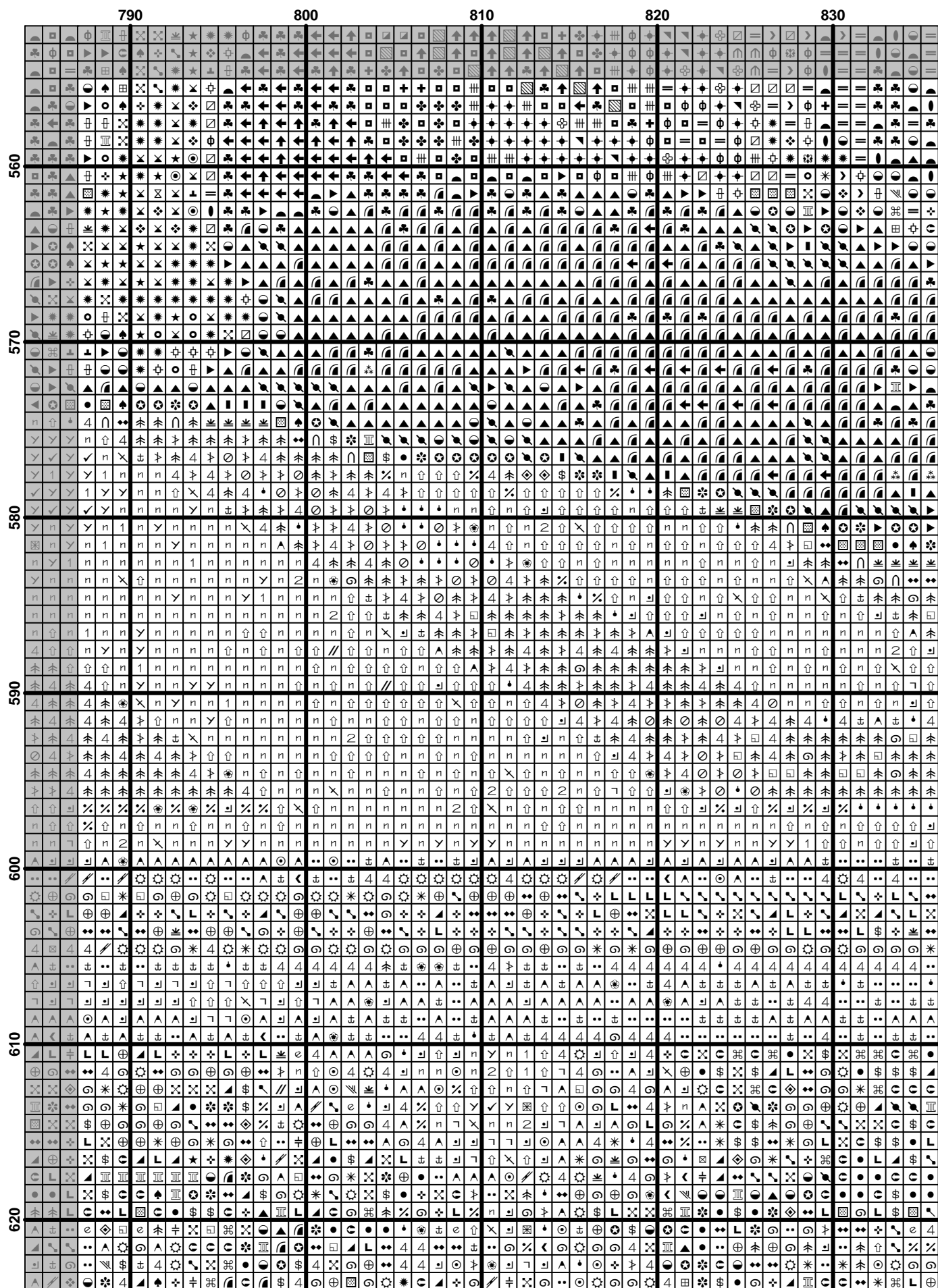
(192) (193)

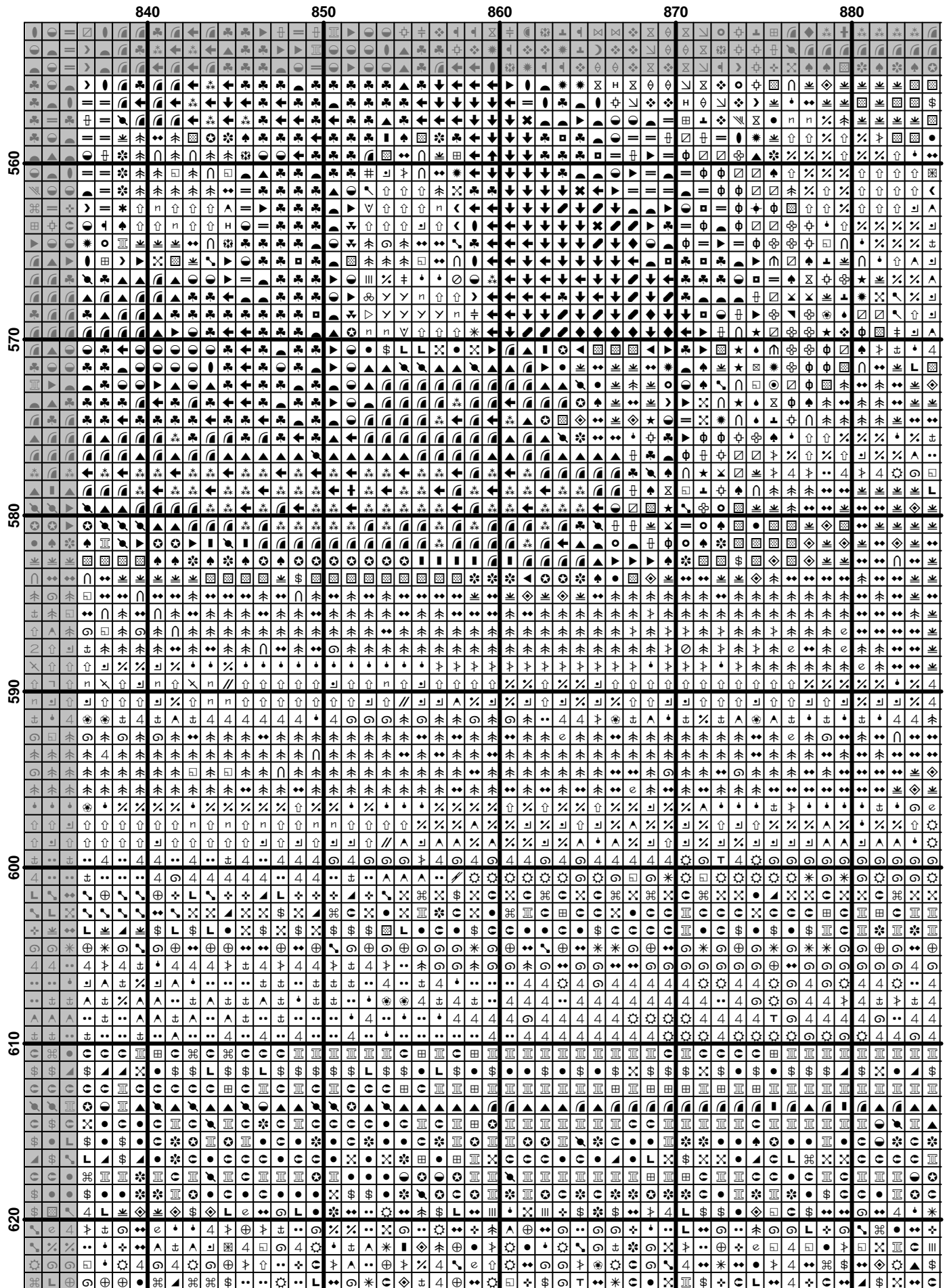


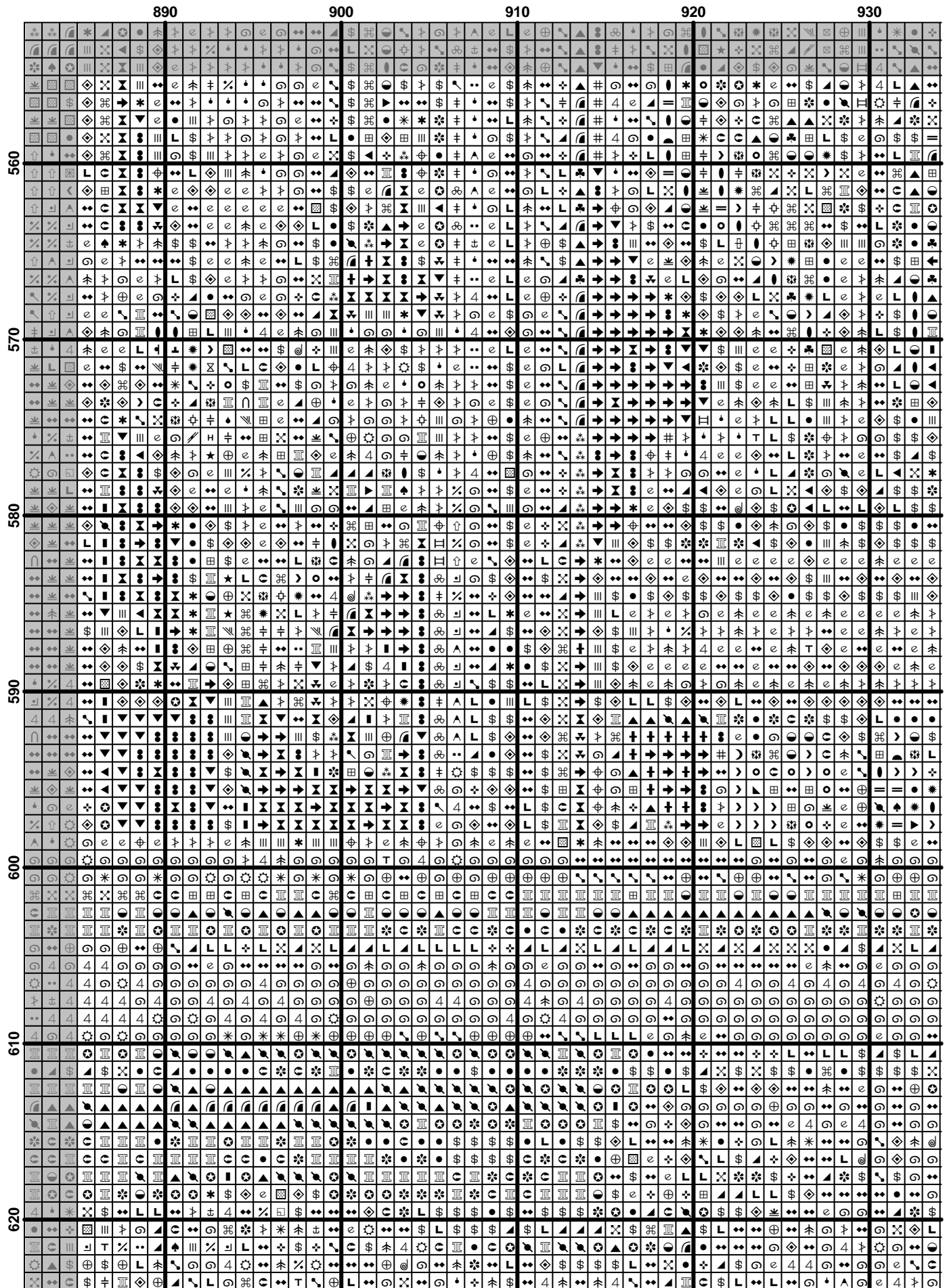
(195)

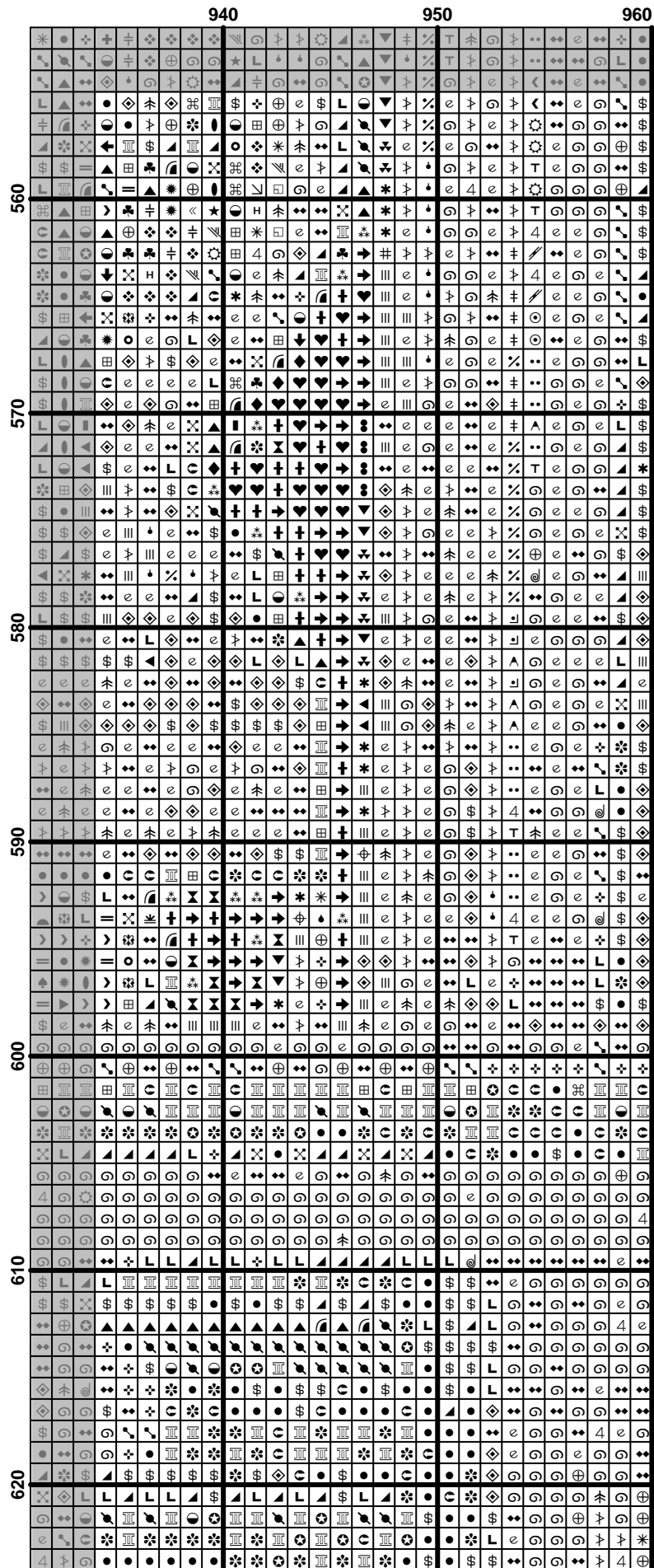


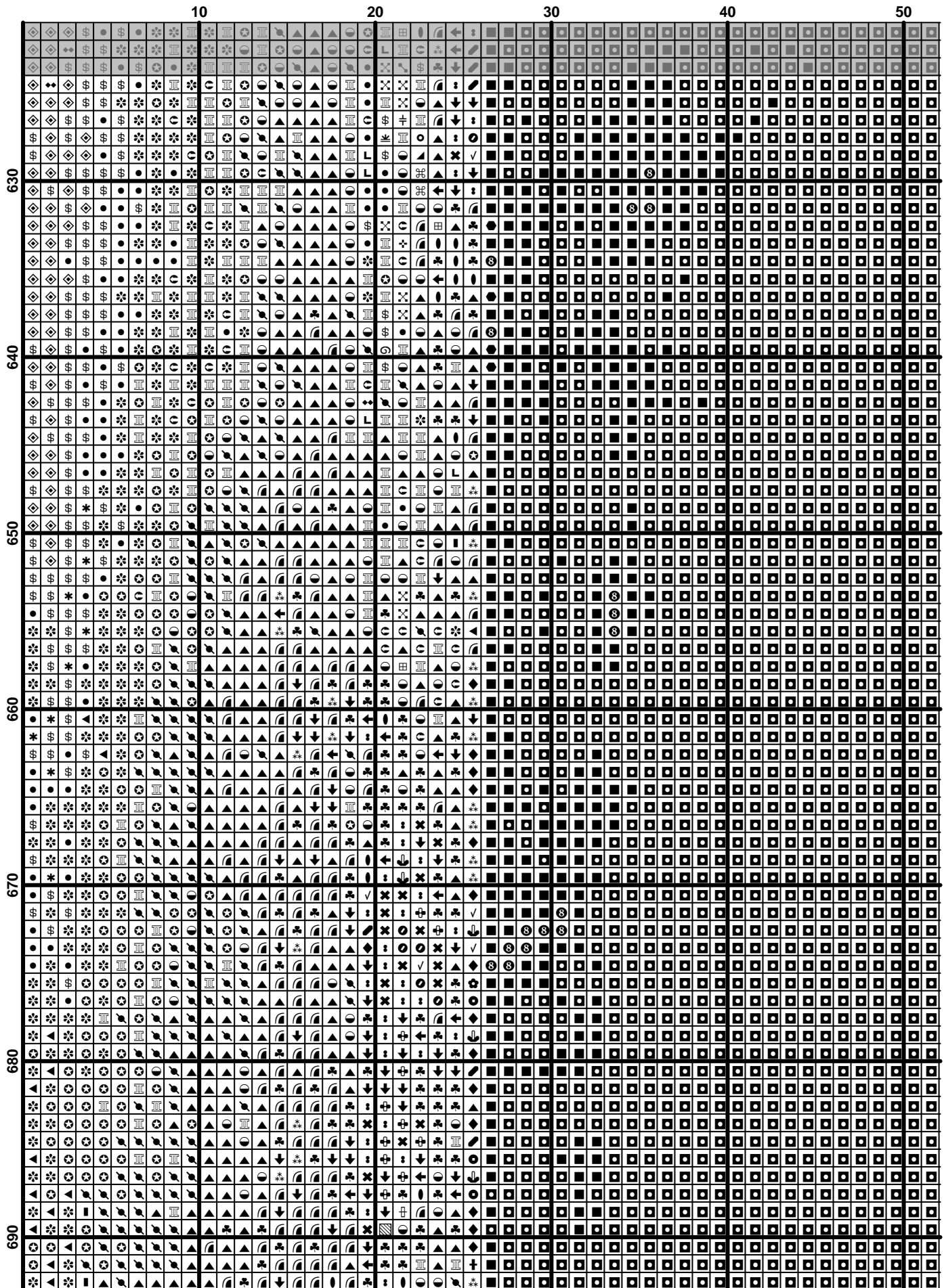


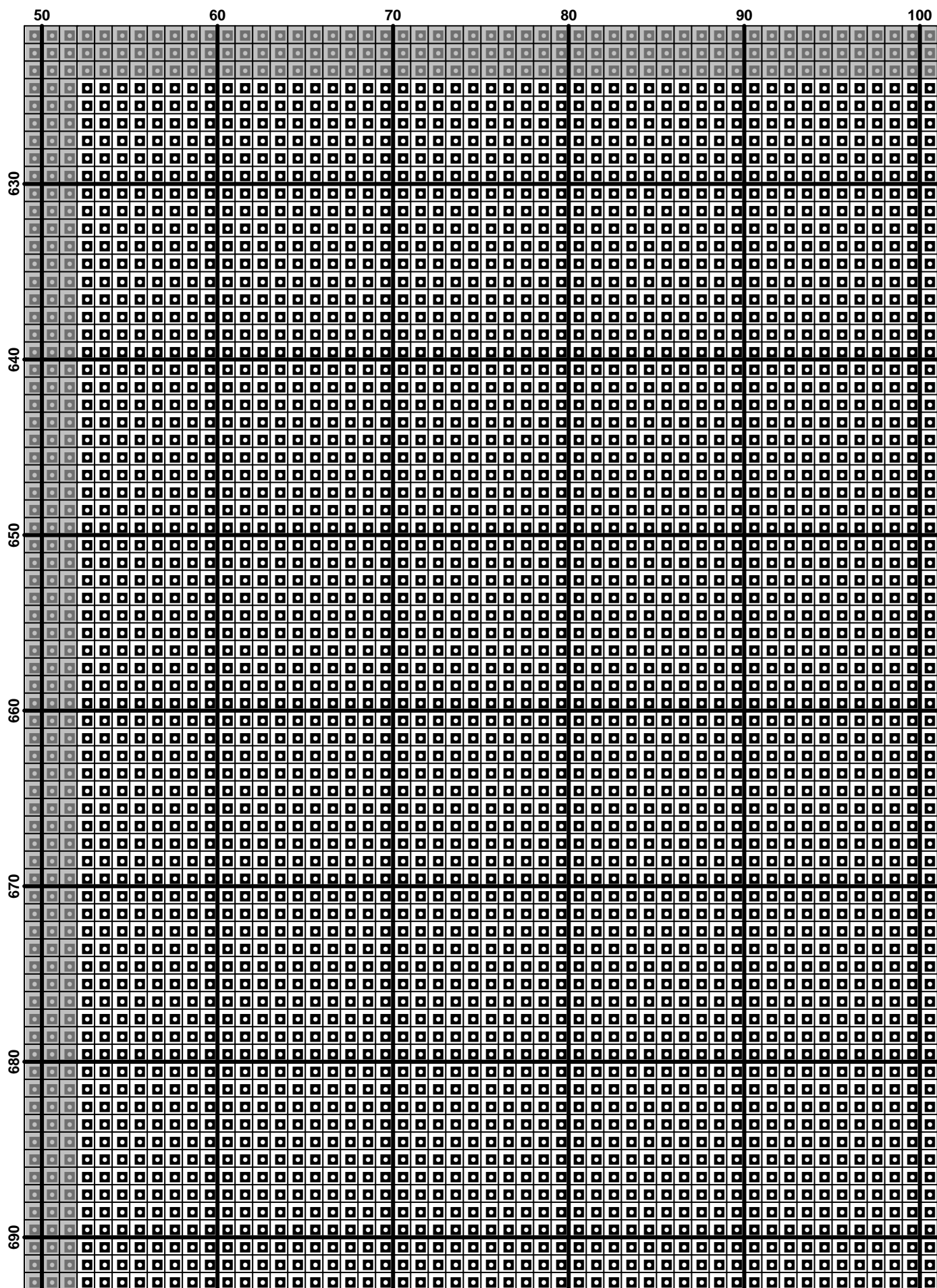


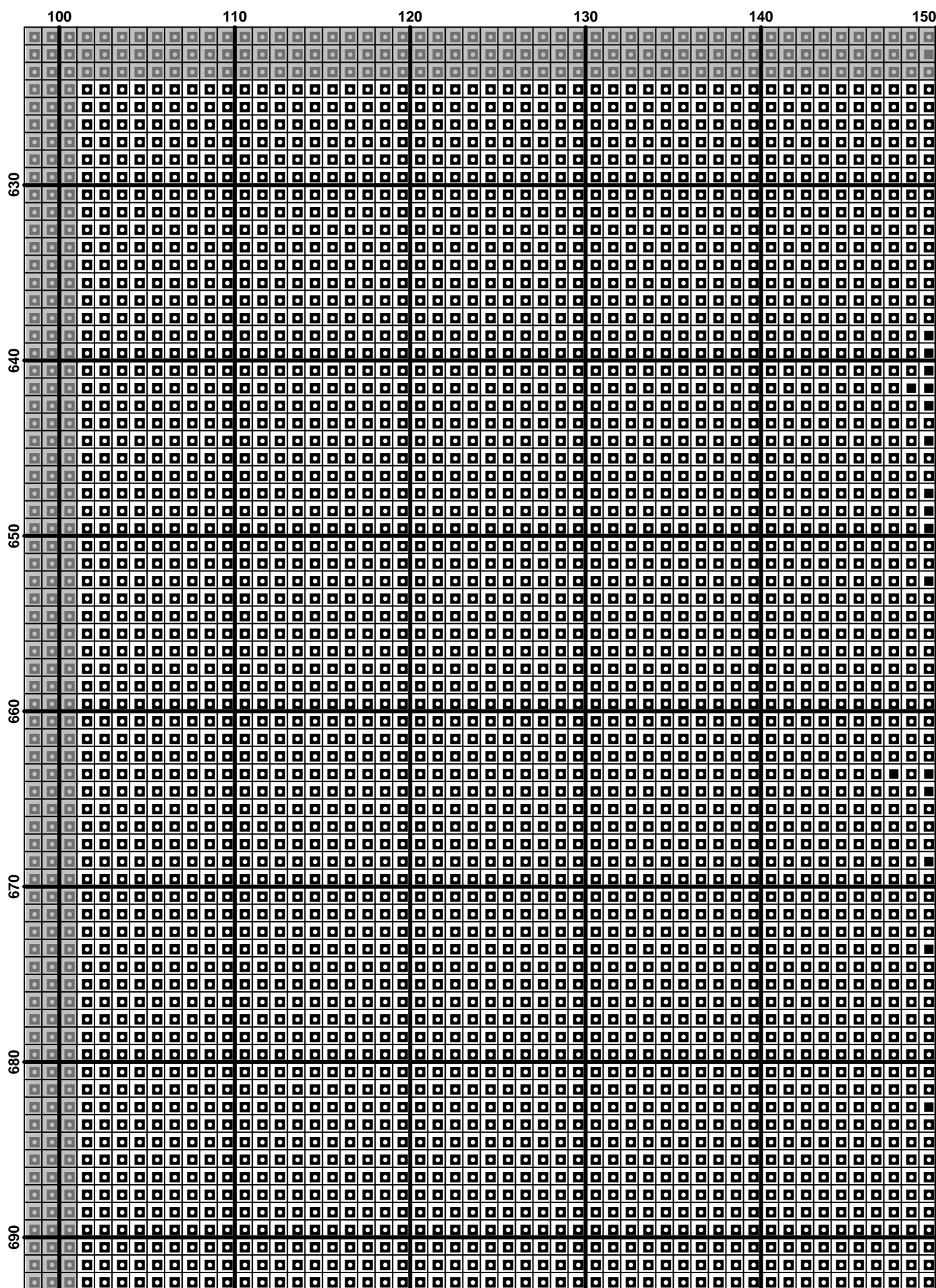


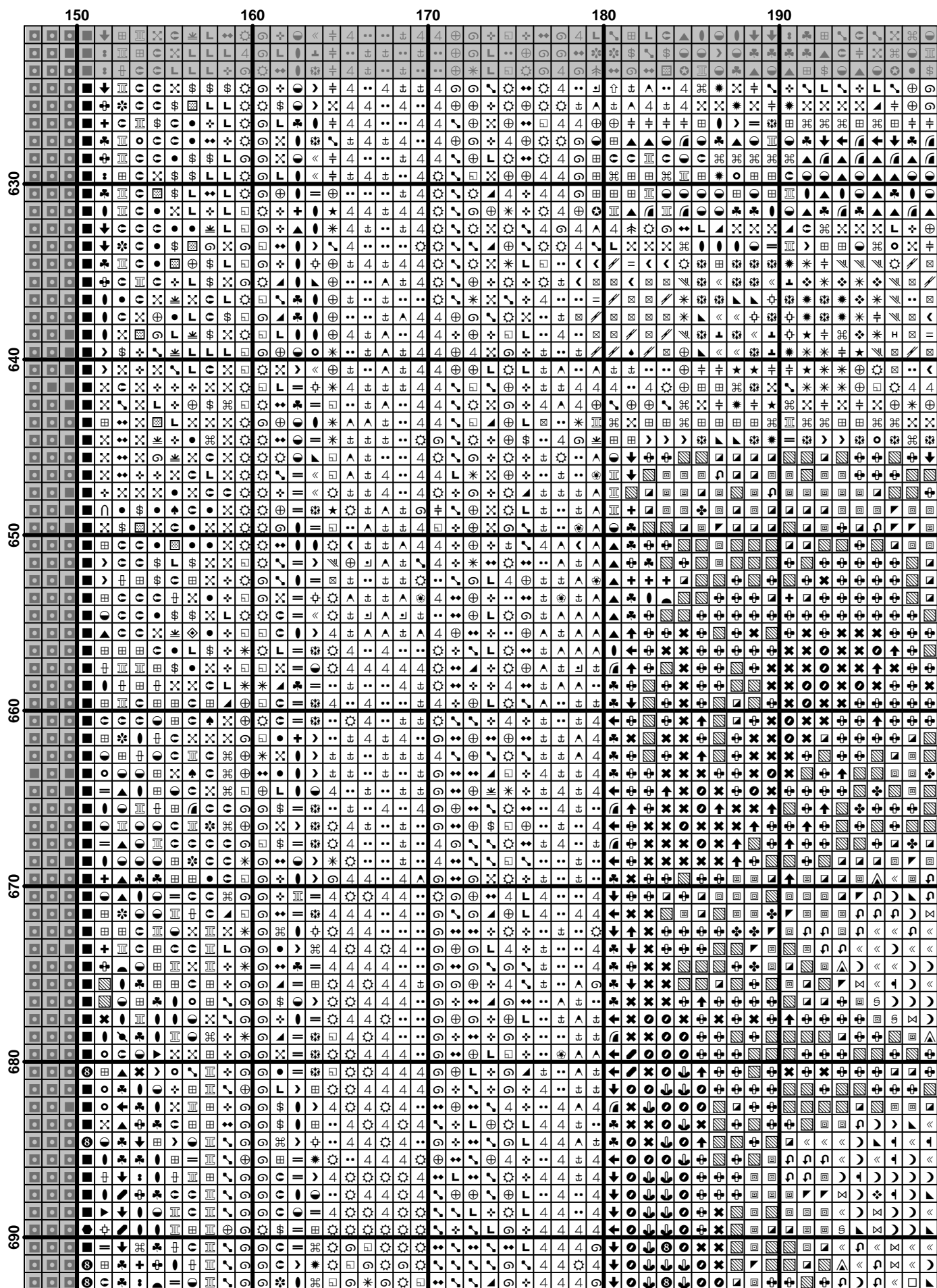








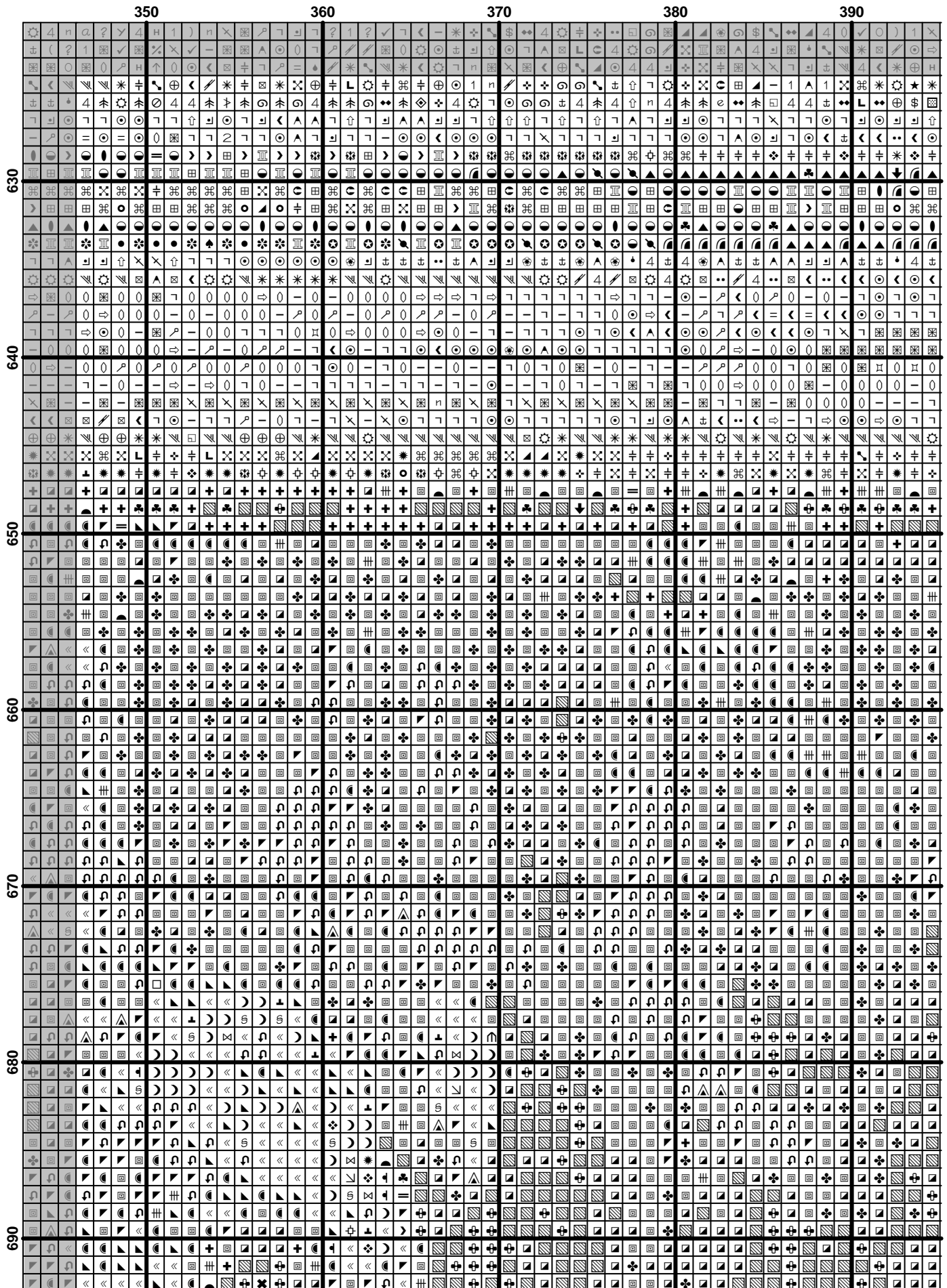




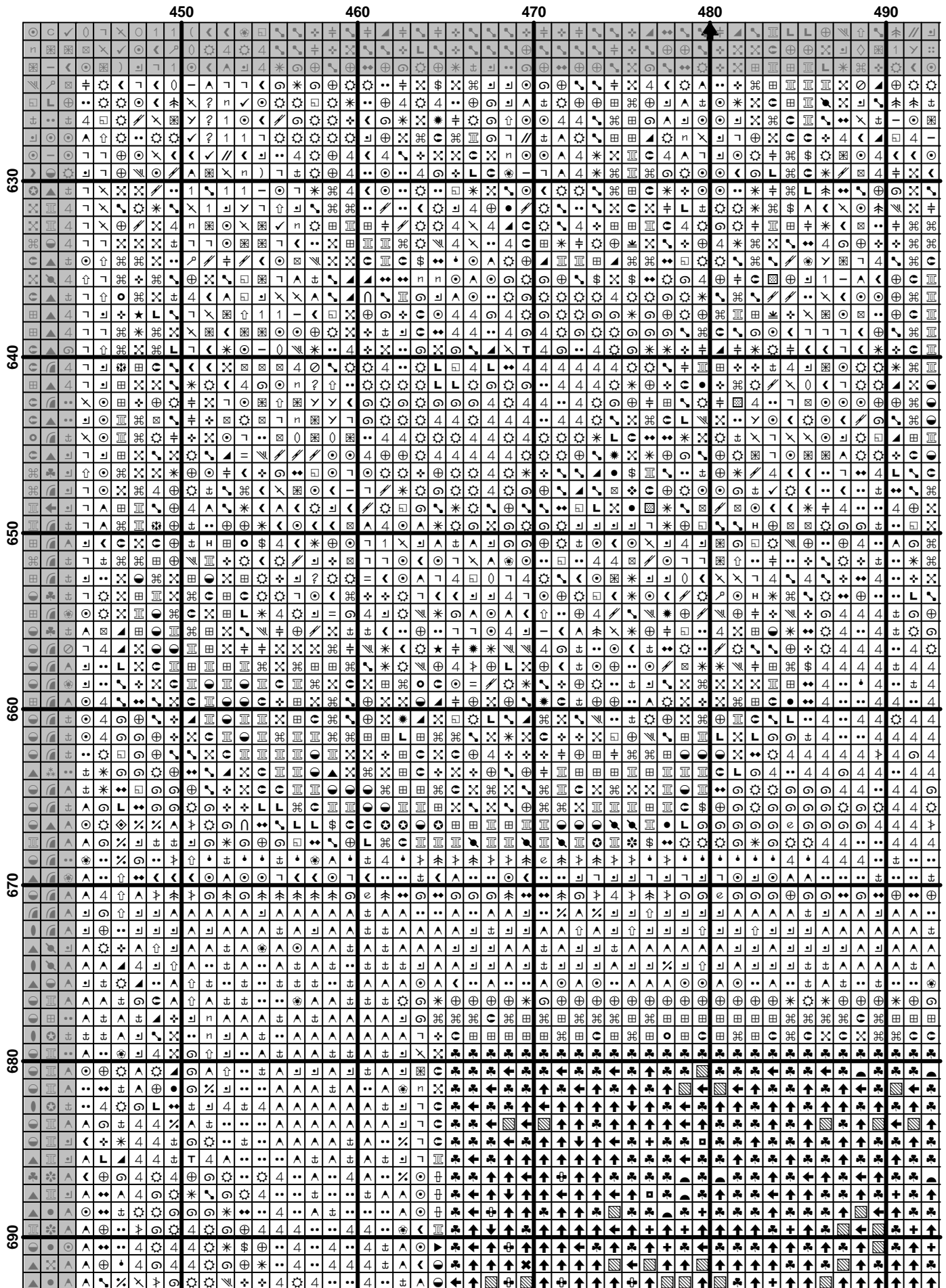


	250	260	270	280	290
630
640
650
660
670
680
690

$$(207) \quad \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \text{ is a } \langle \text{N} \rangle \text{.} \quad (208)$$

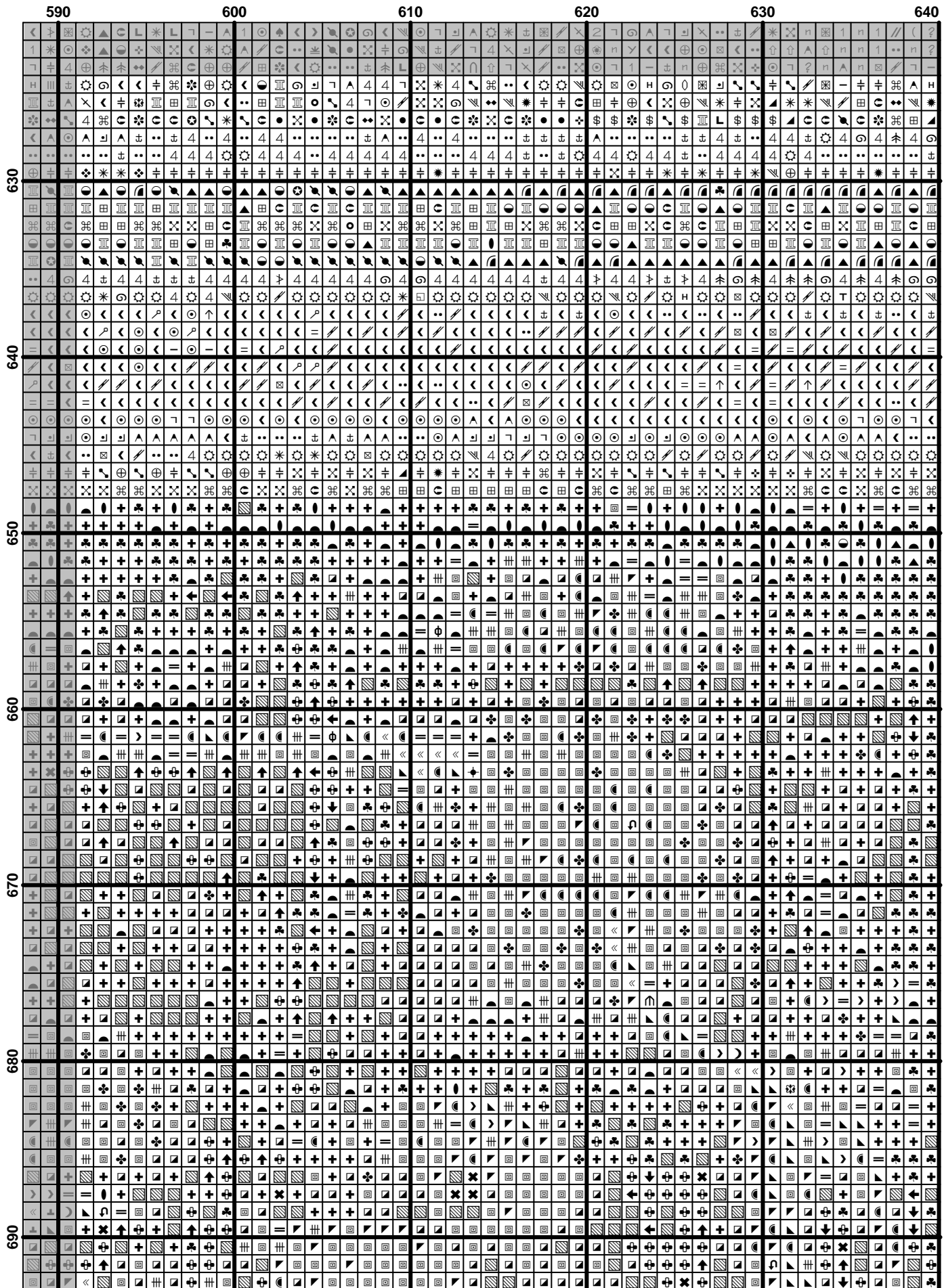


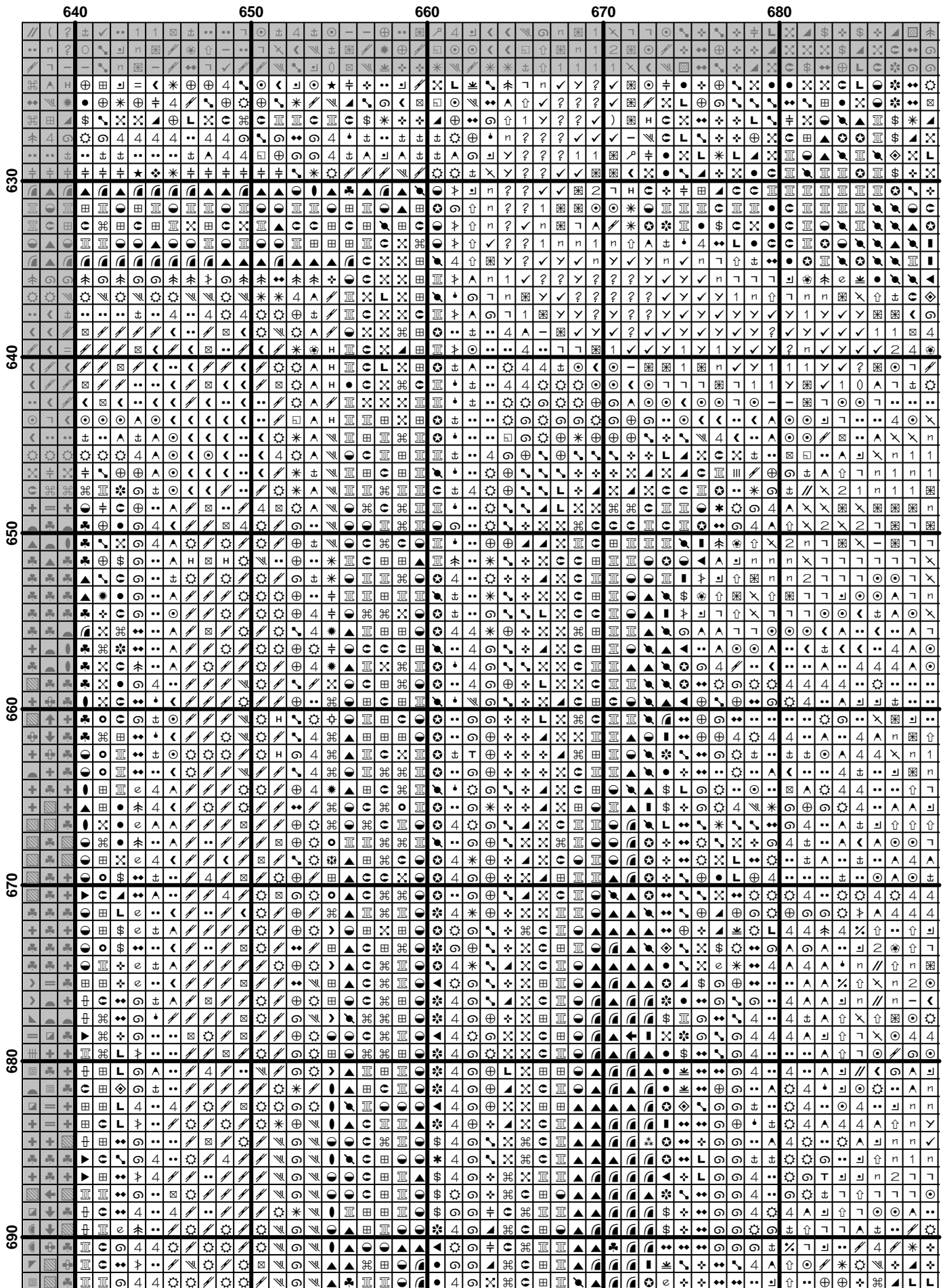
(210)



(212)

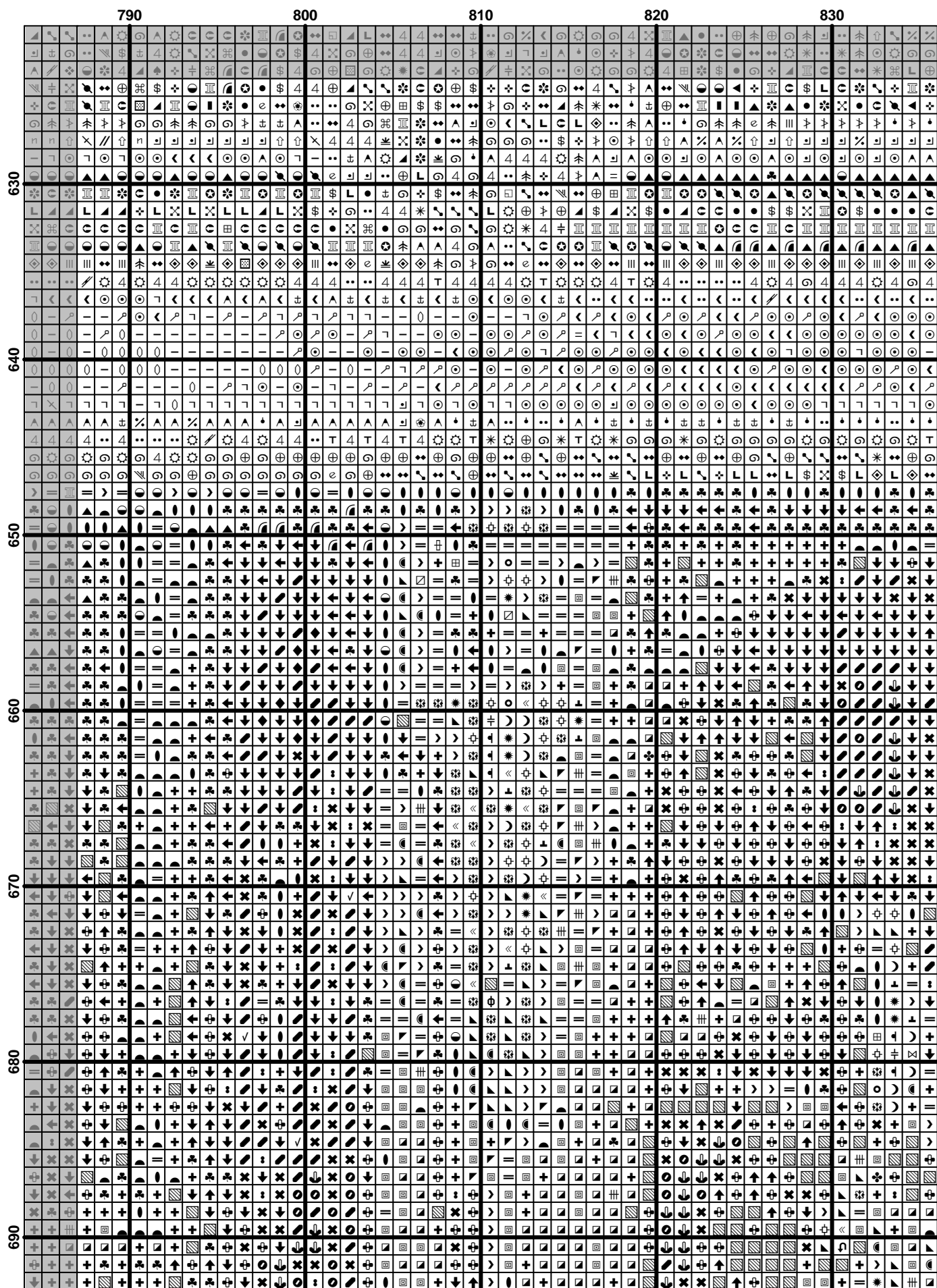
(213)

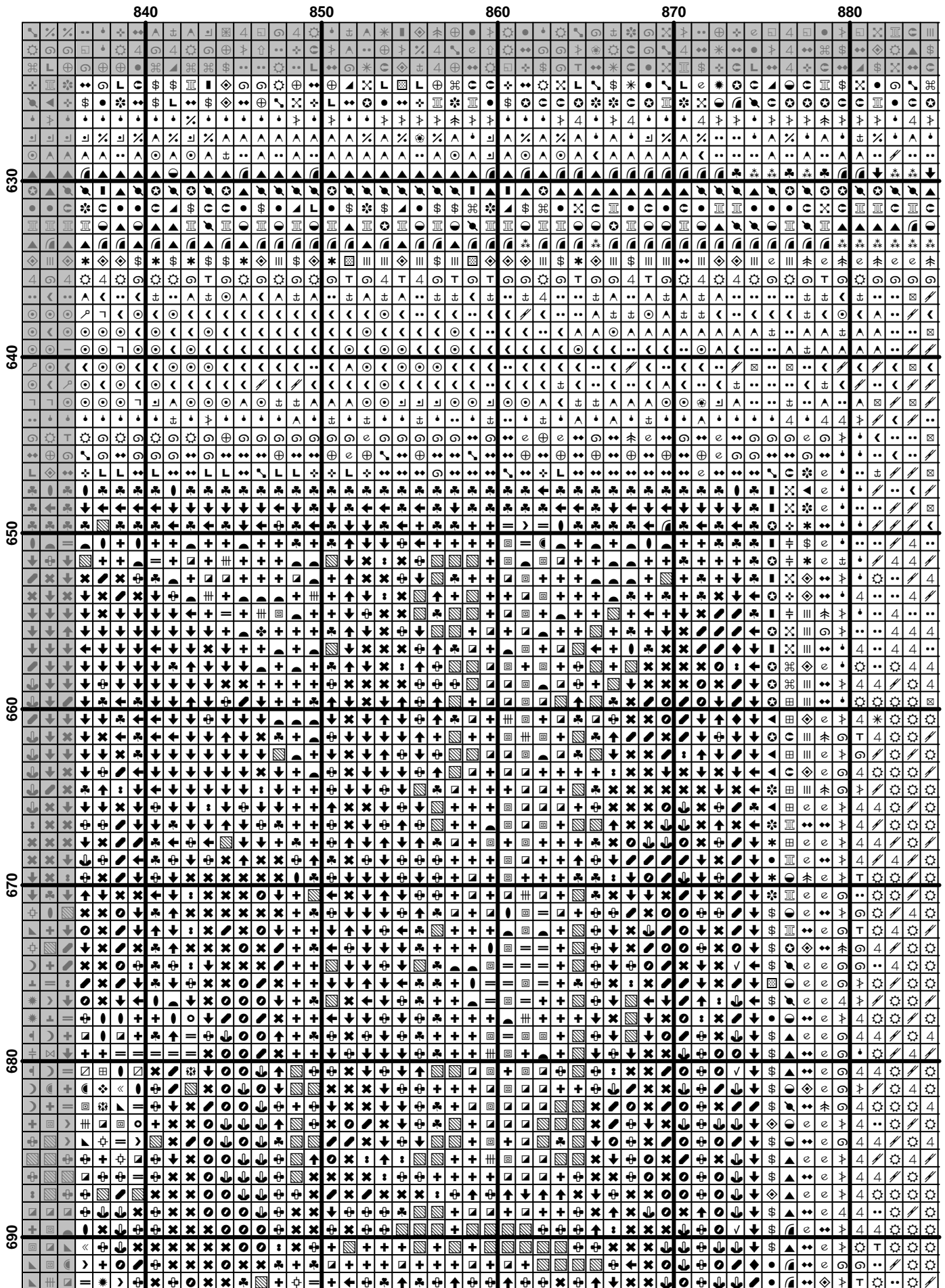


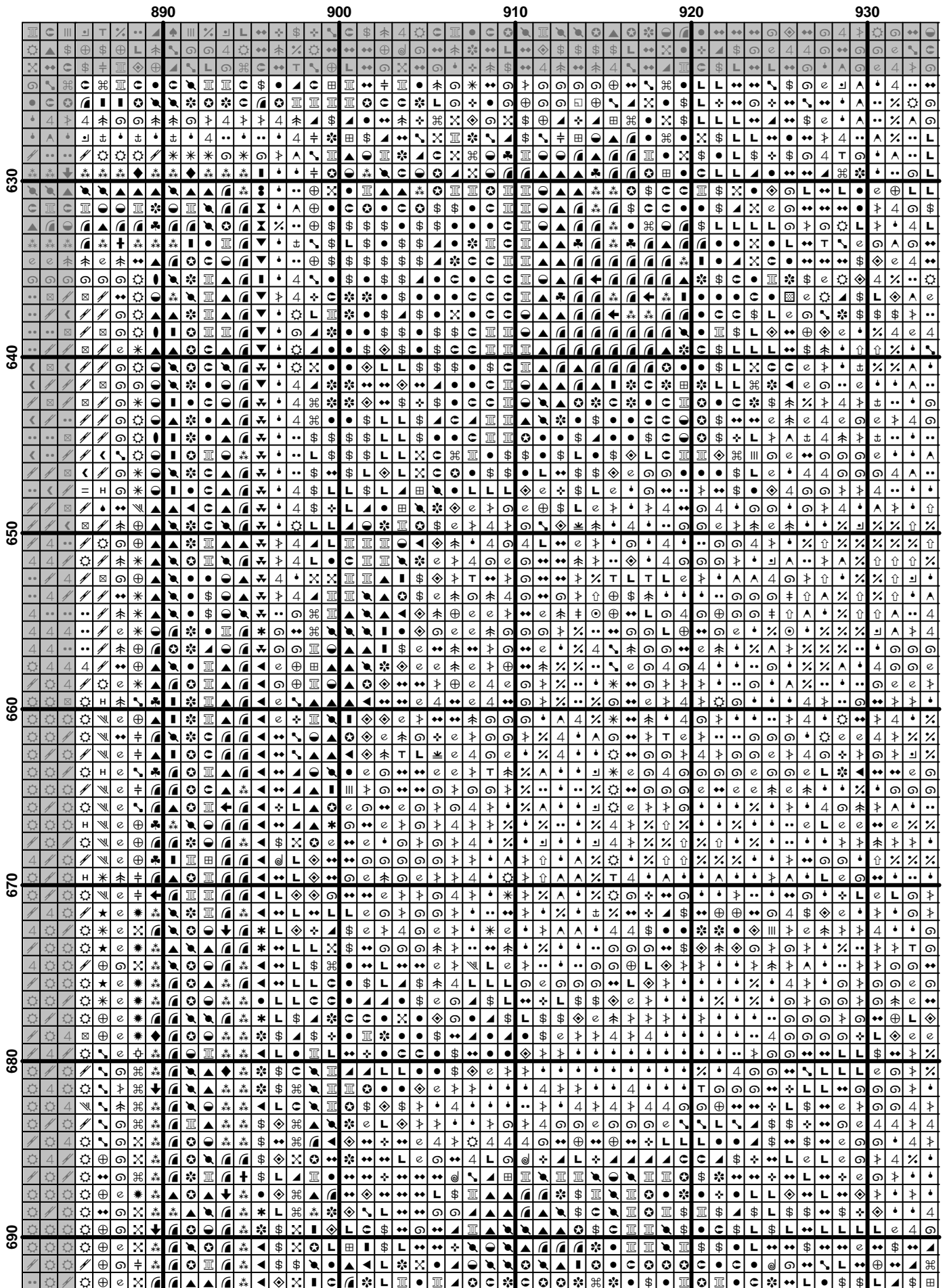


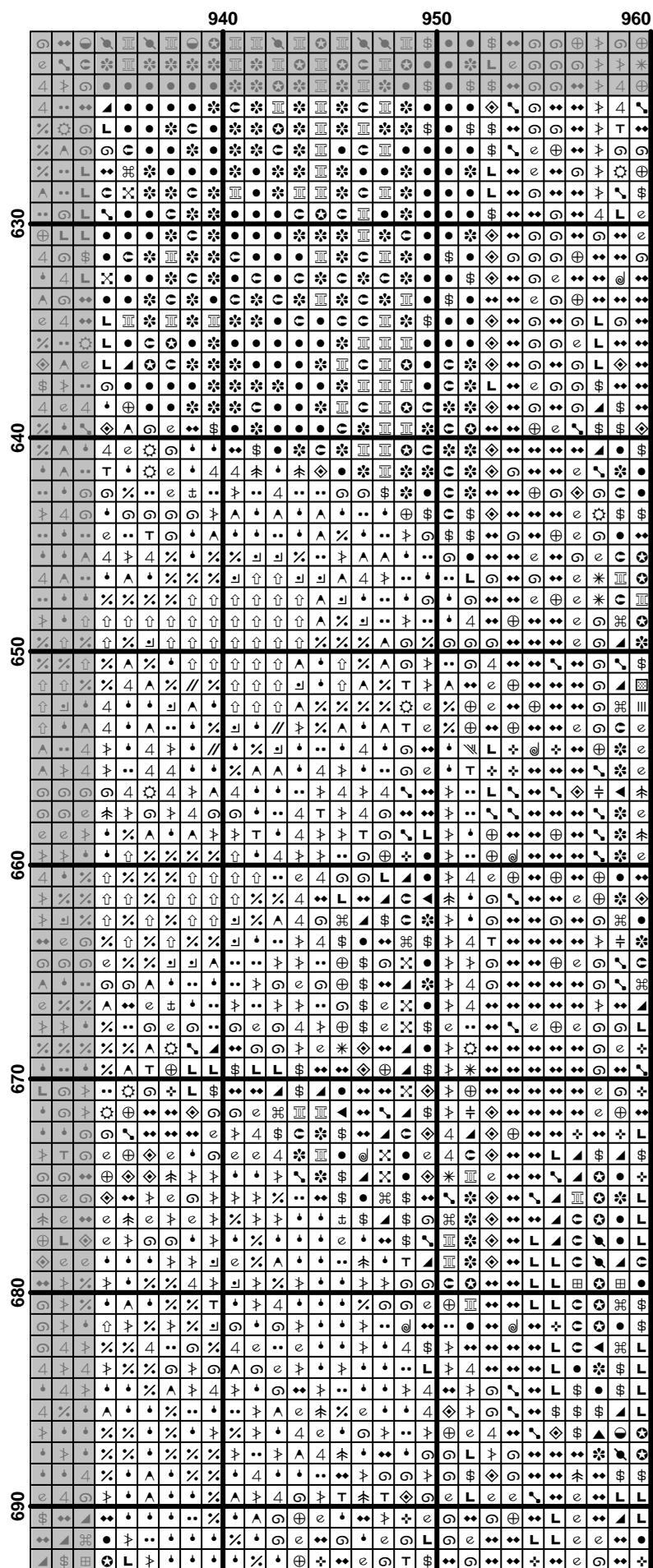
(216)

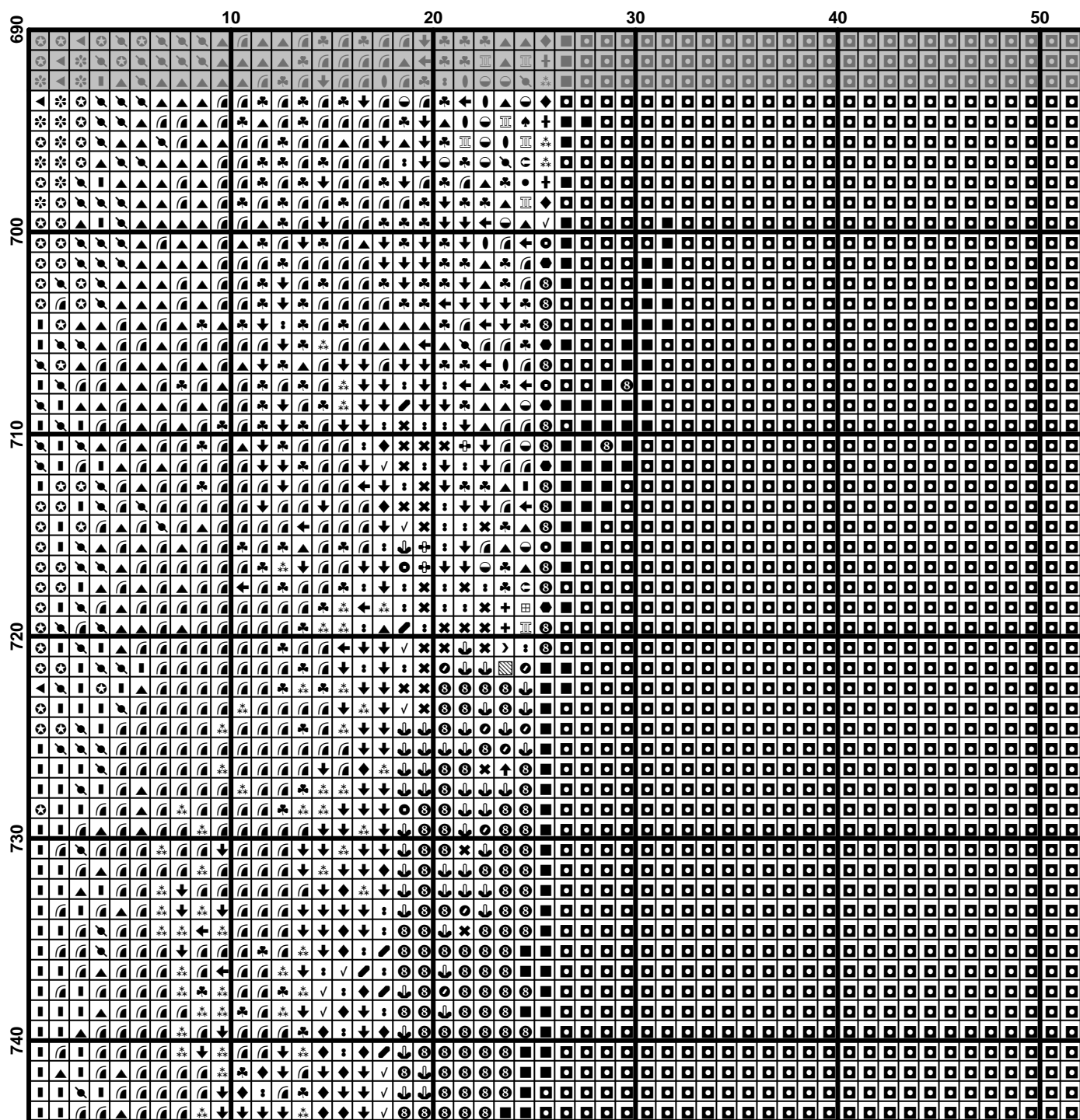
	740	750	760	770	780
630					
640					
650					
660					
670					
680					
690					

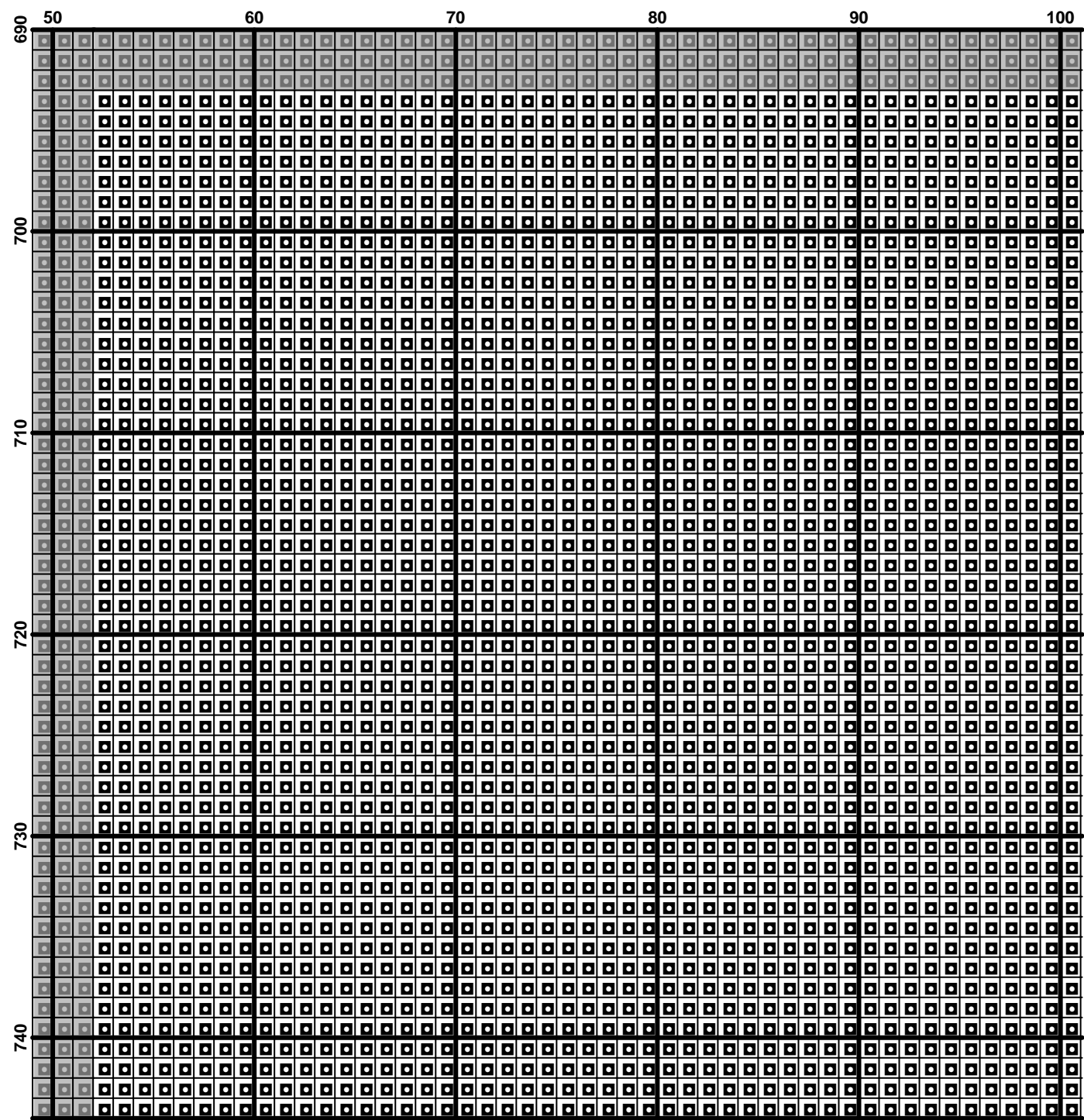


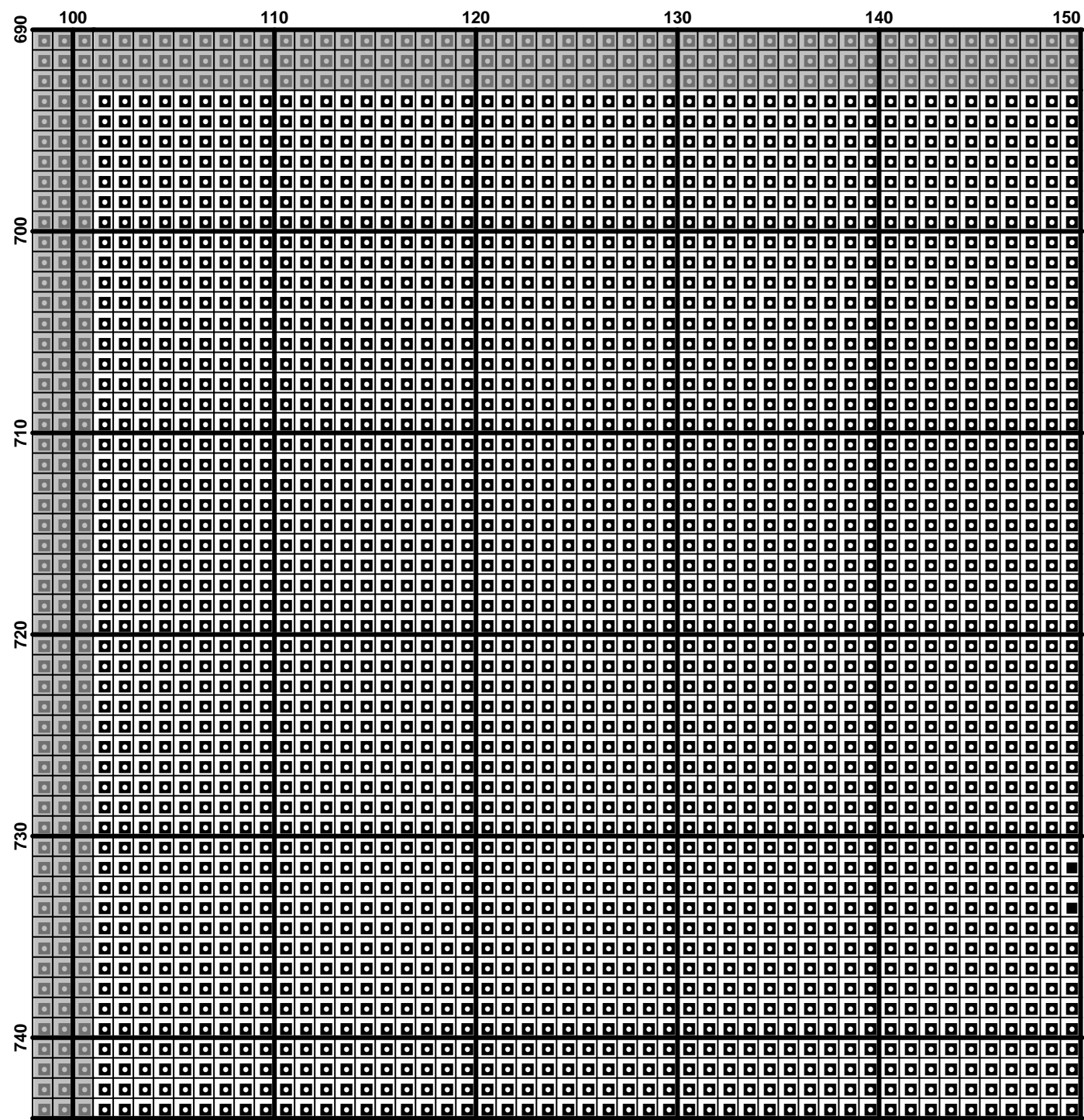


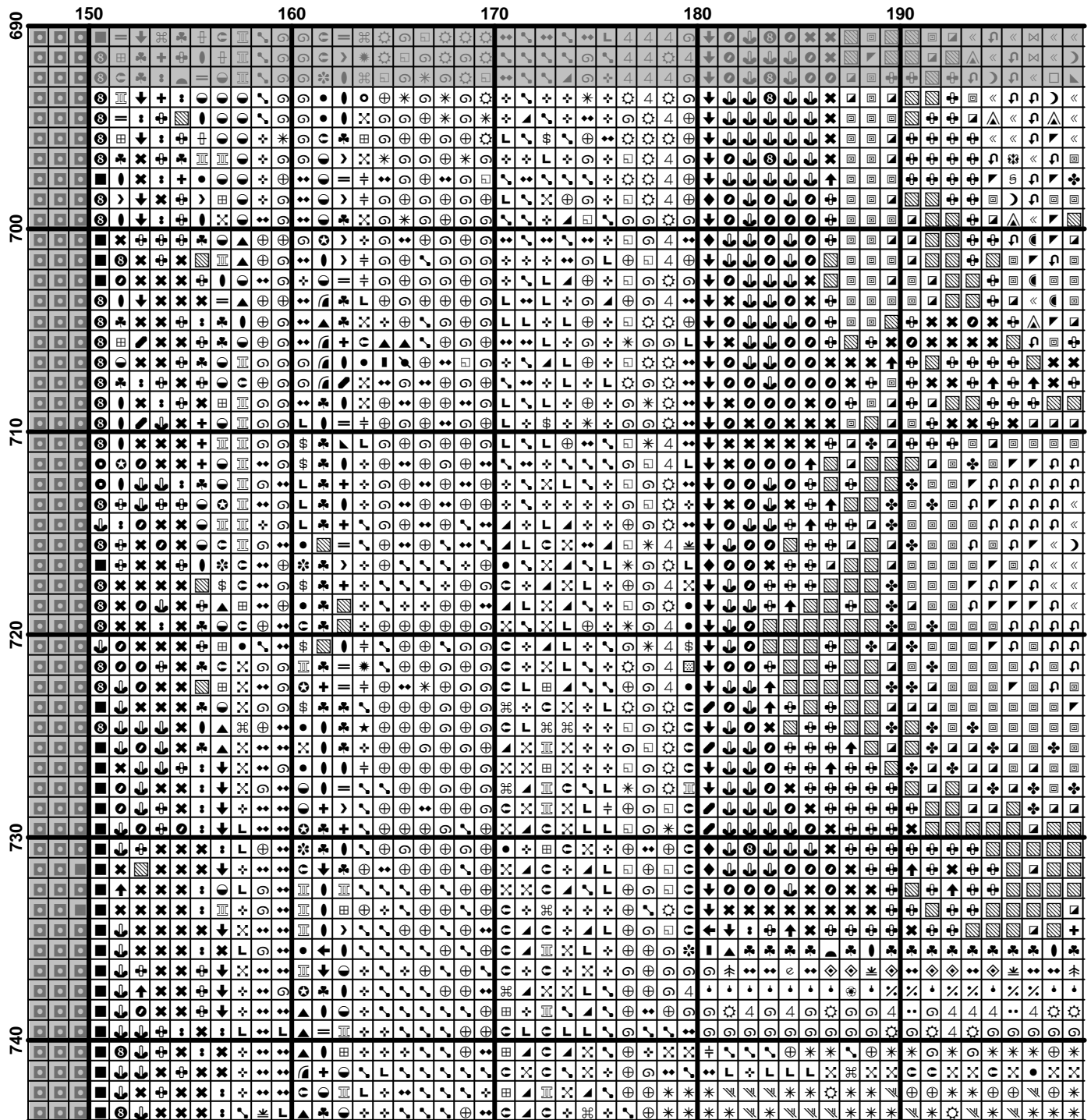


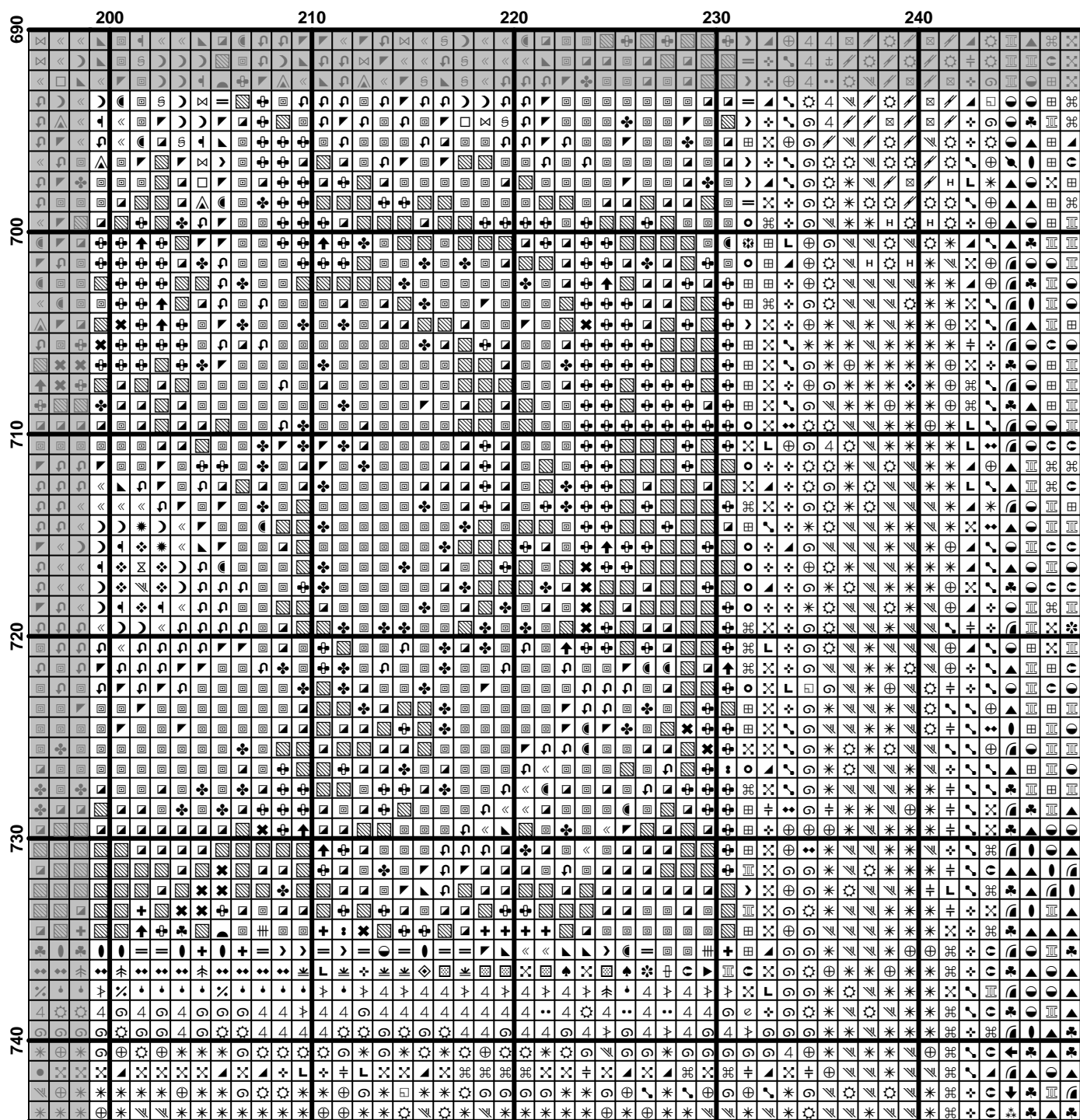


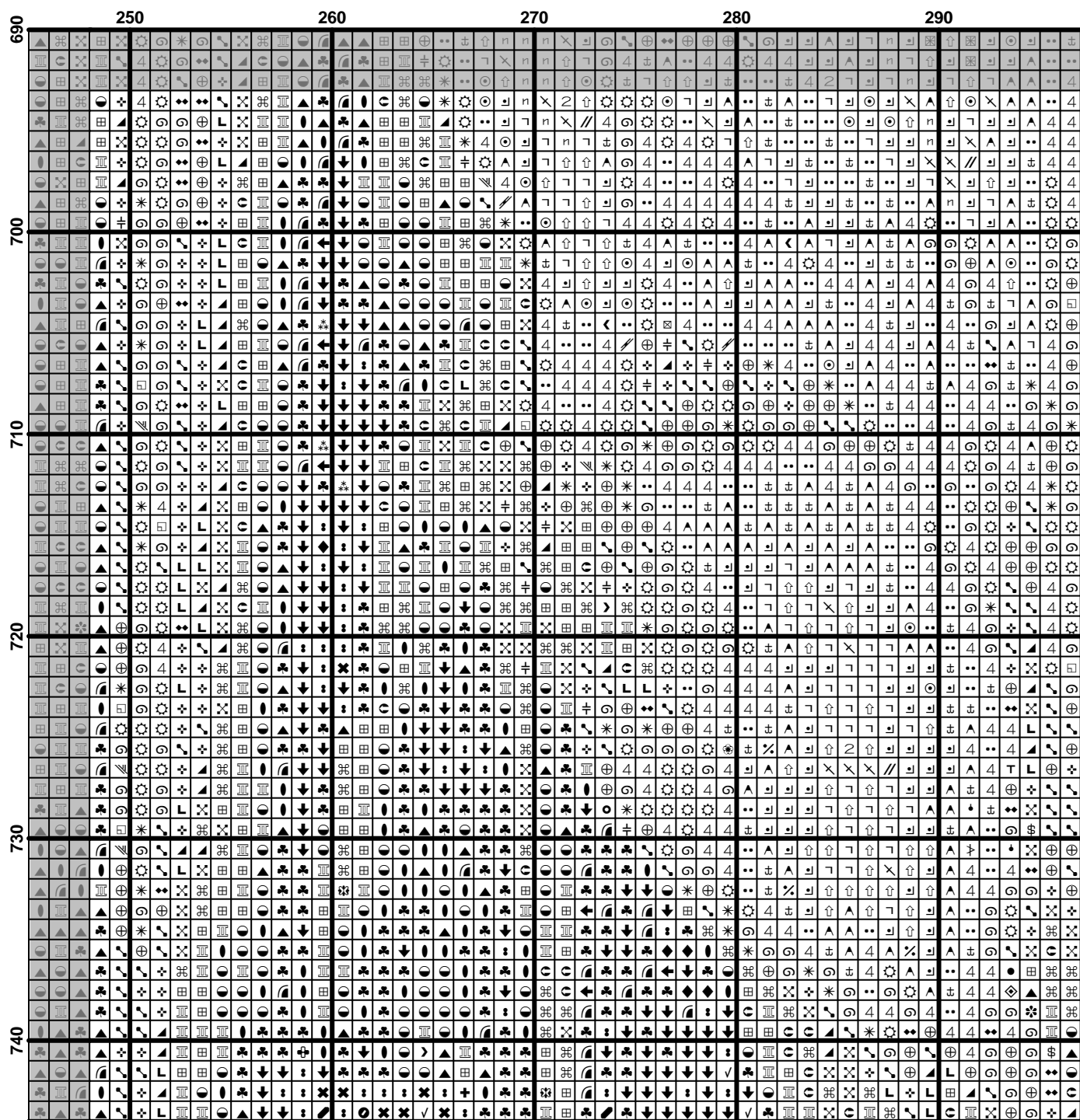


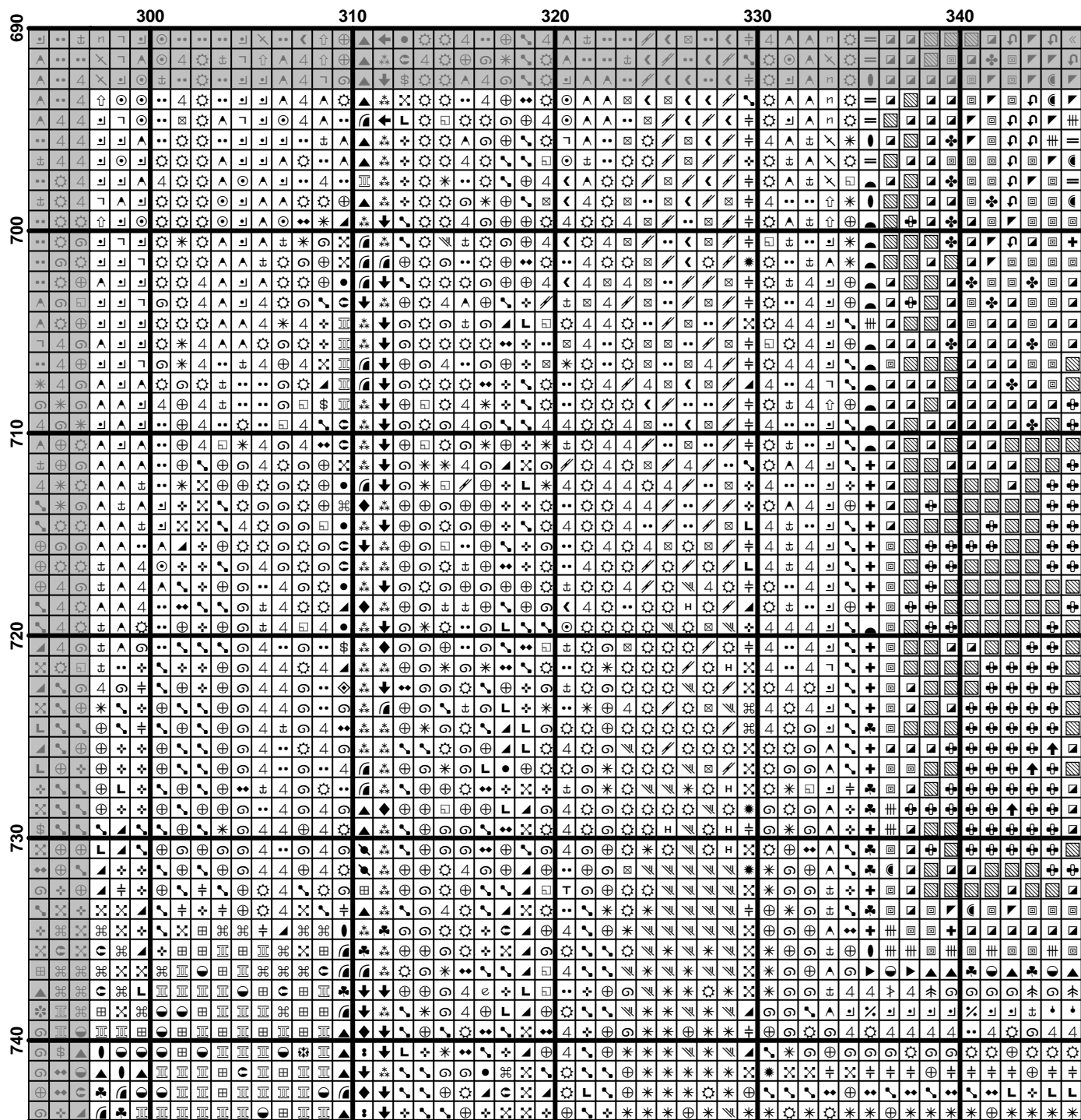


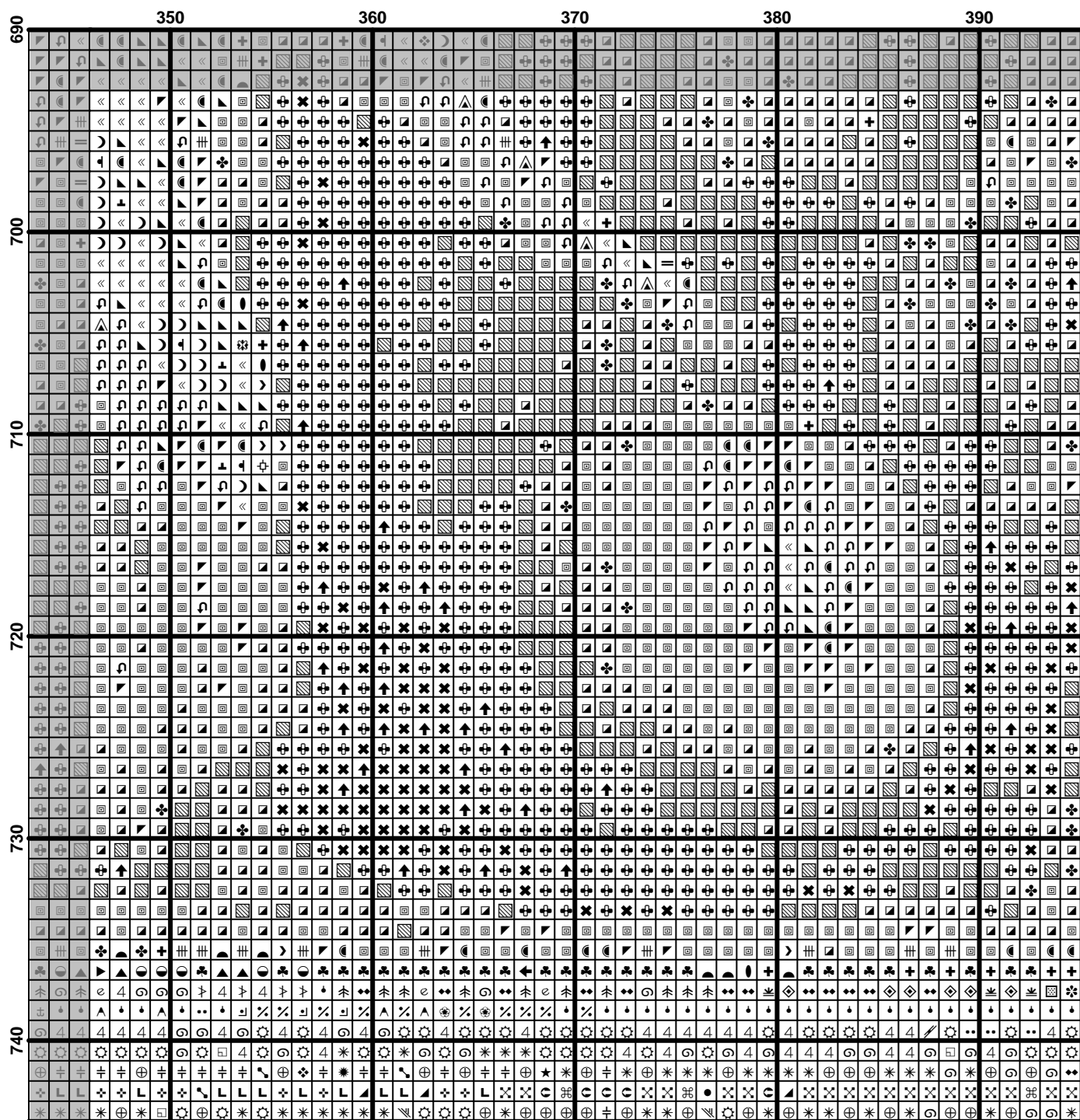


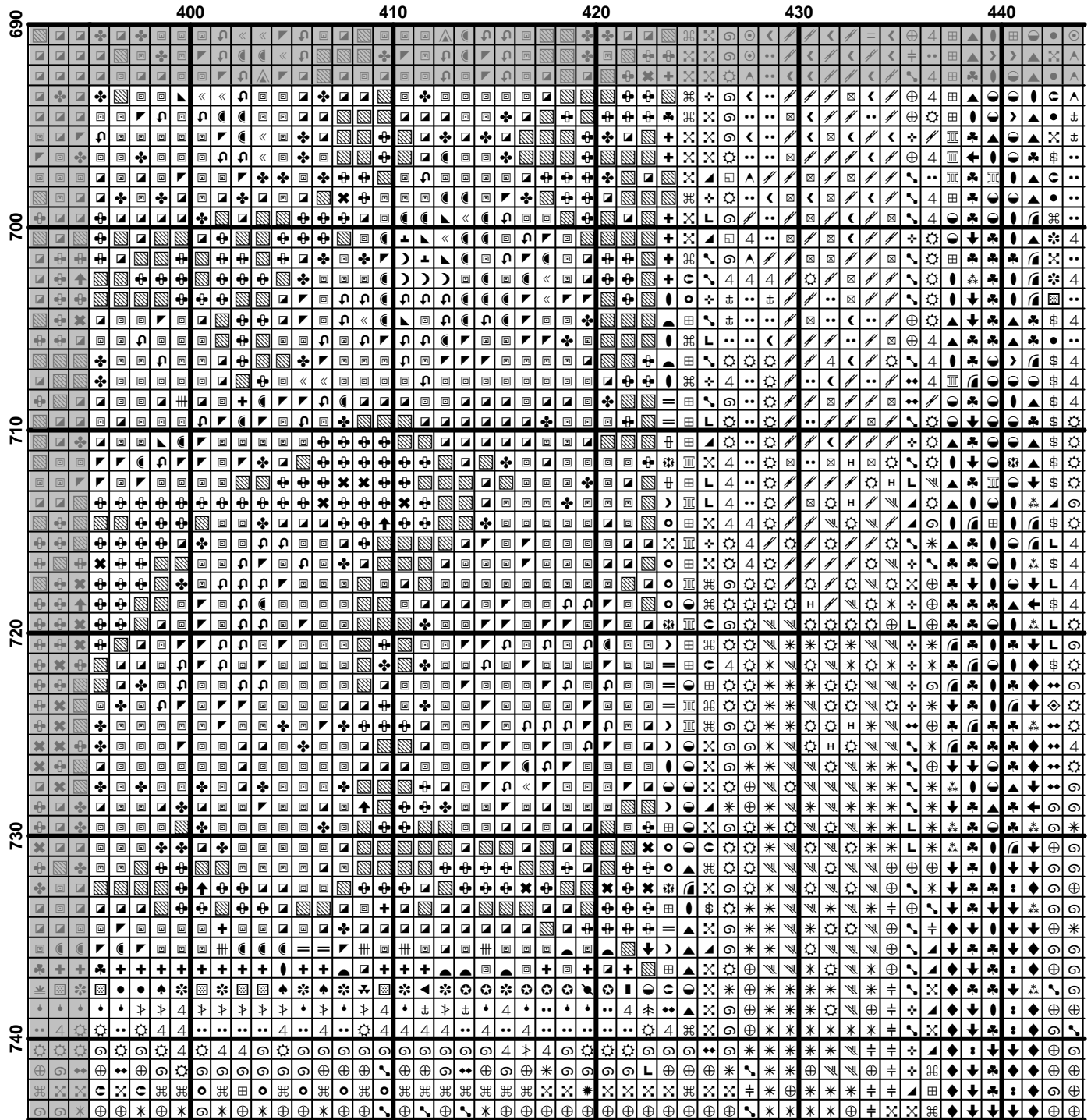


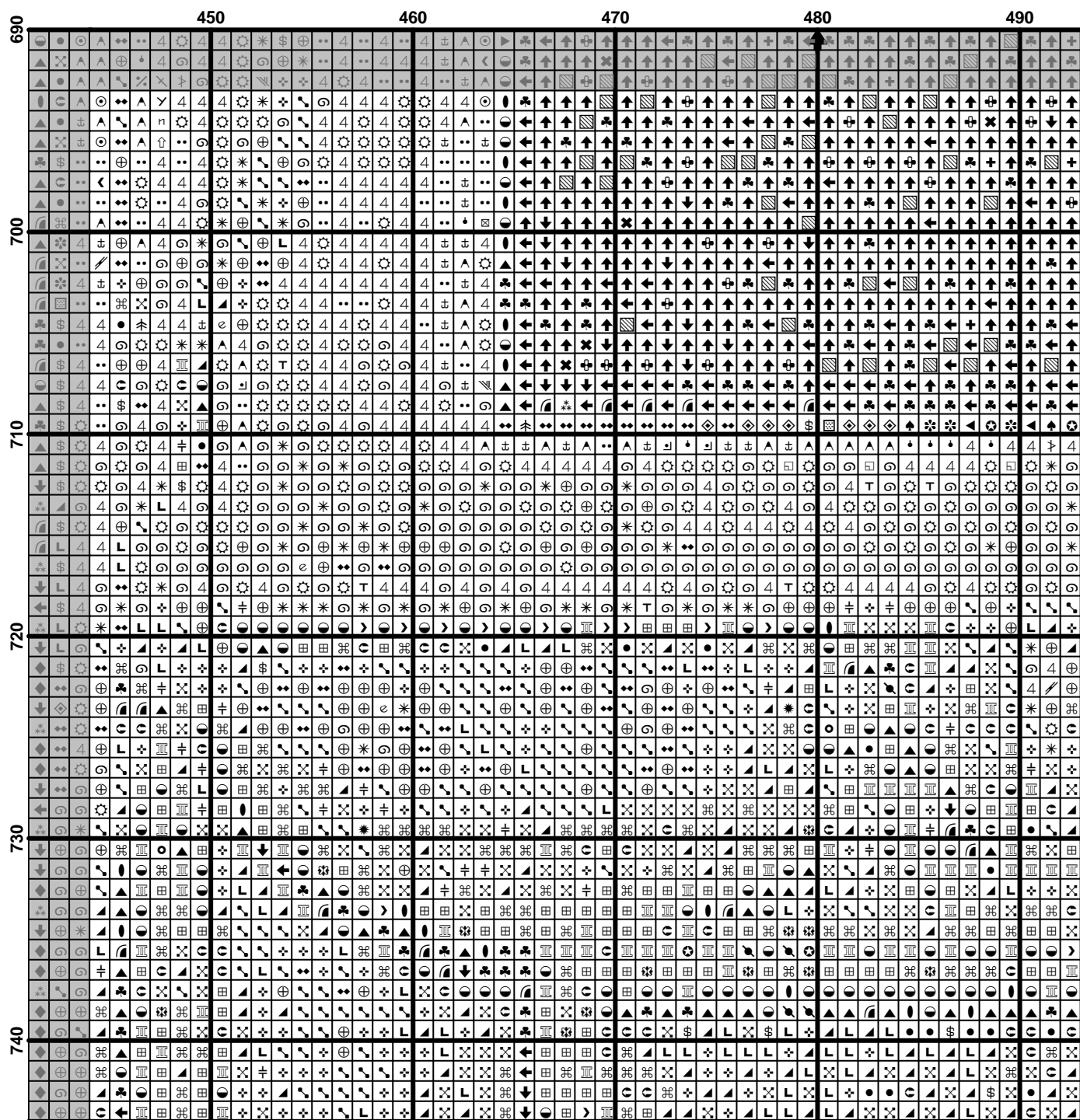


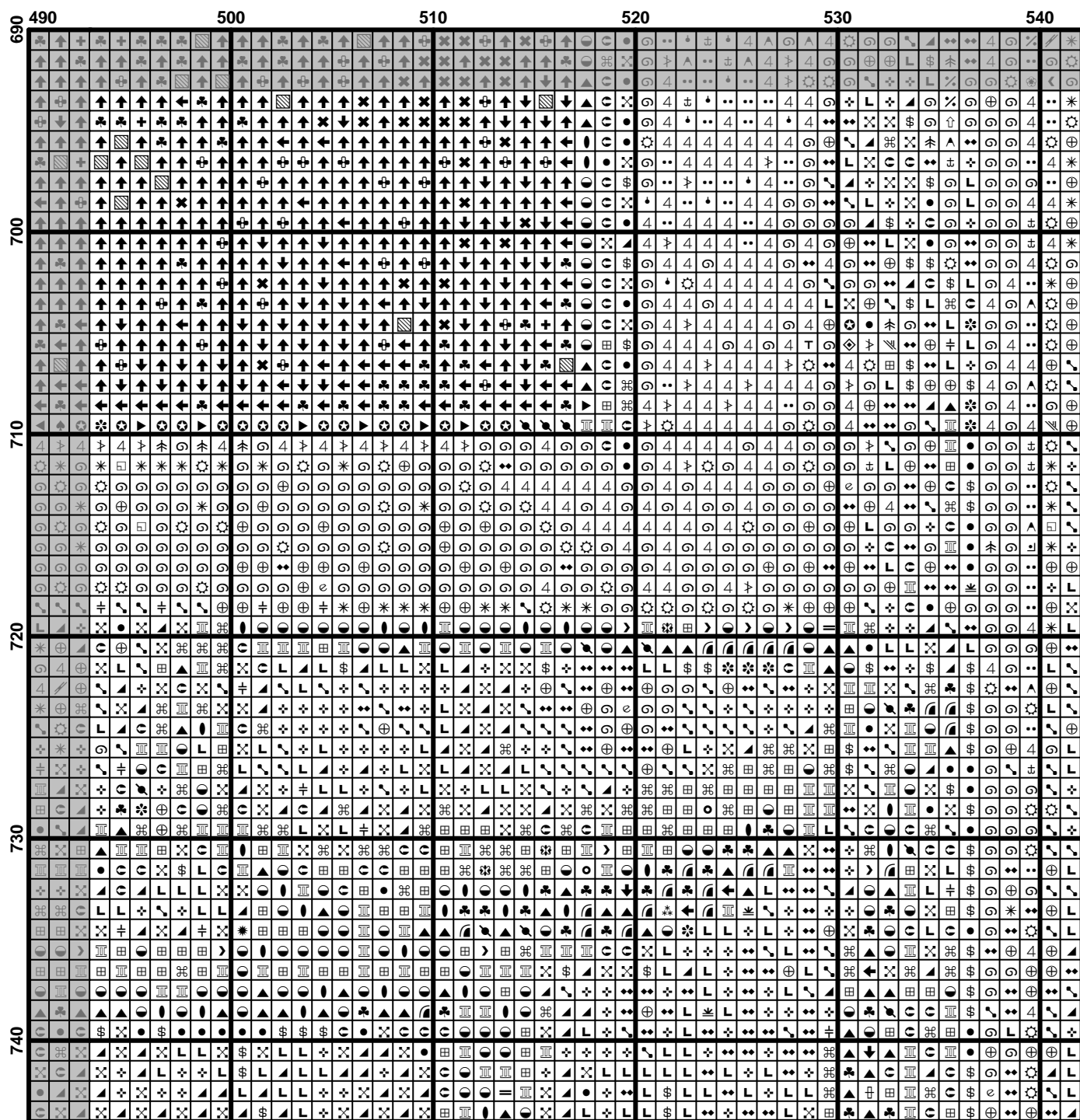


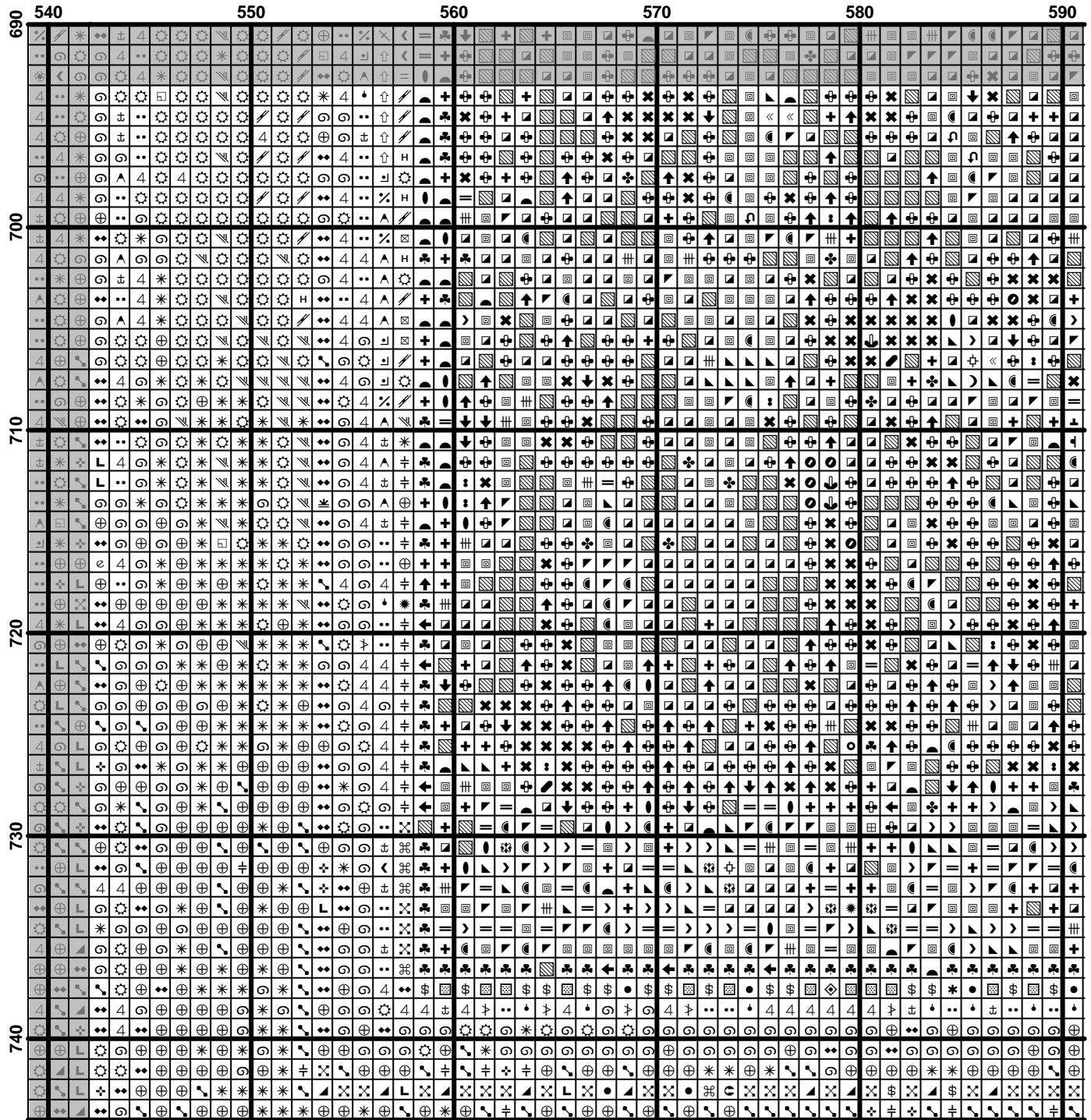


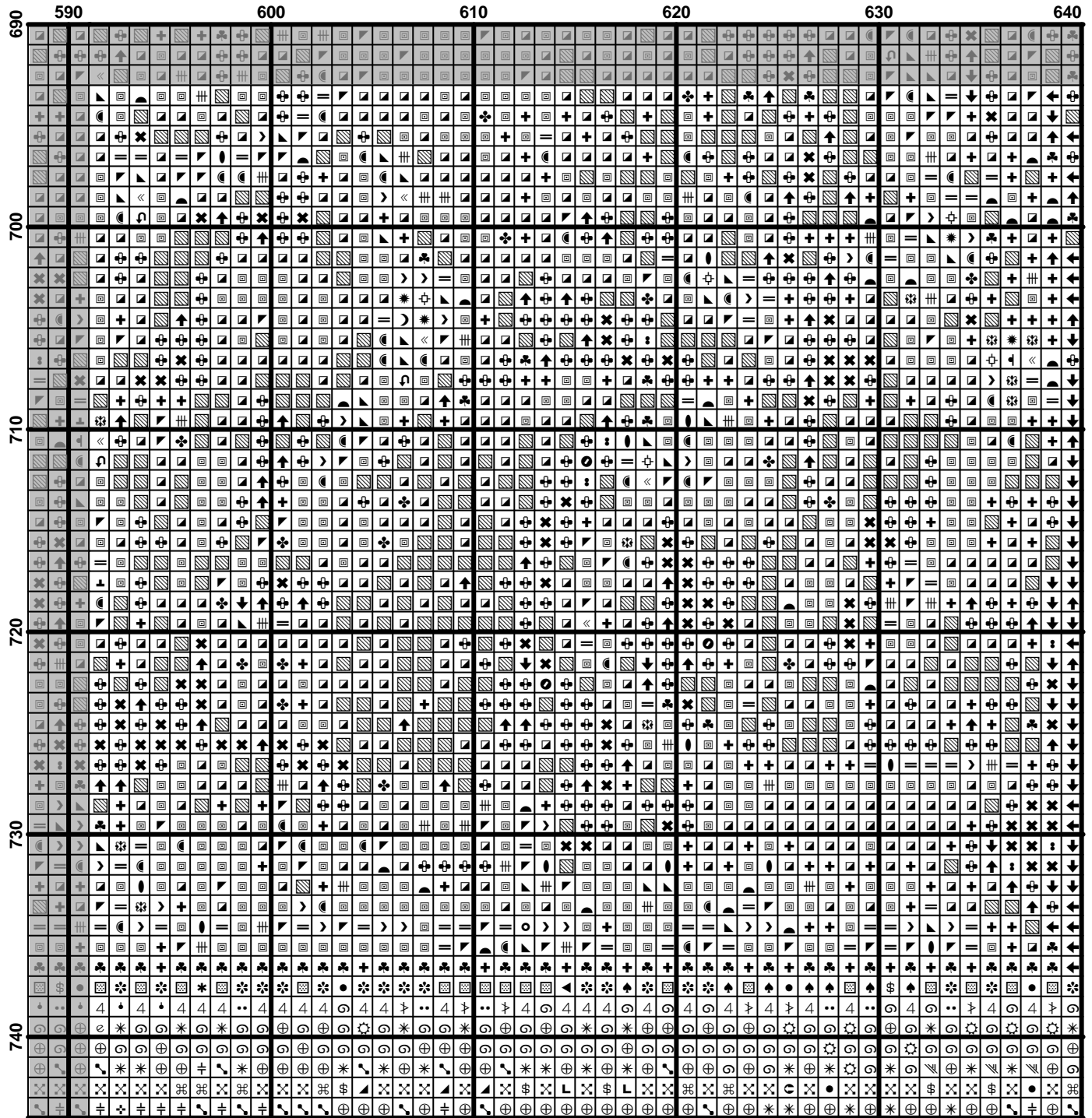


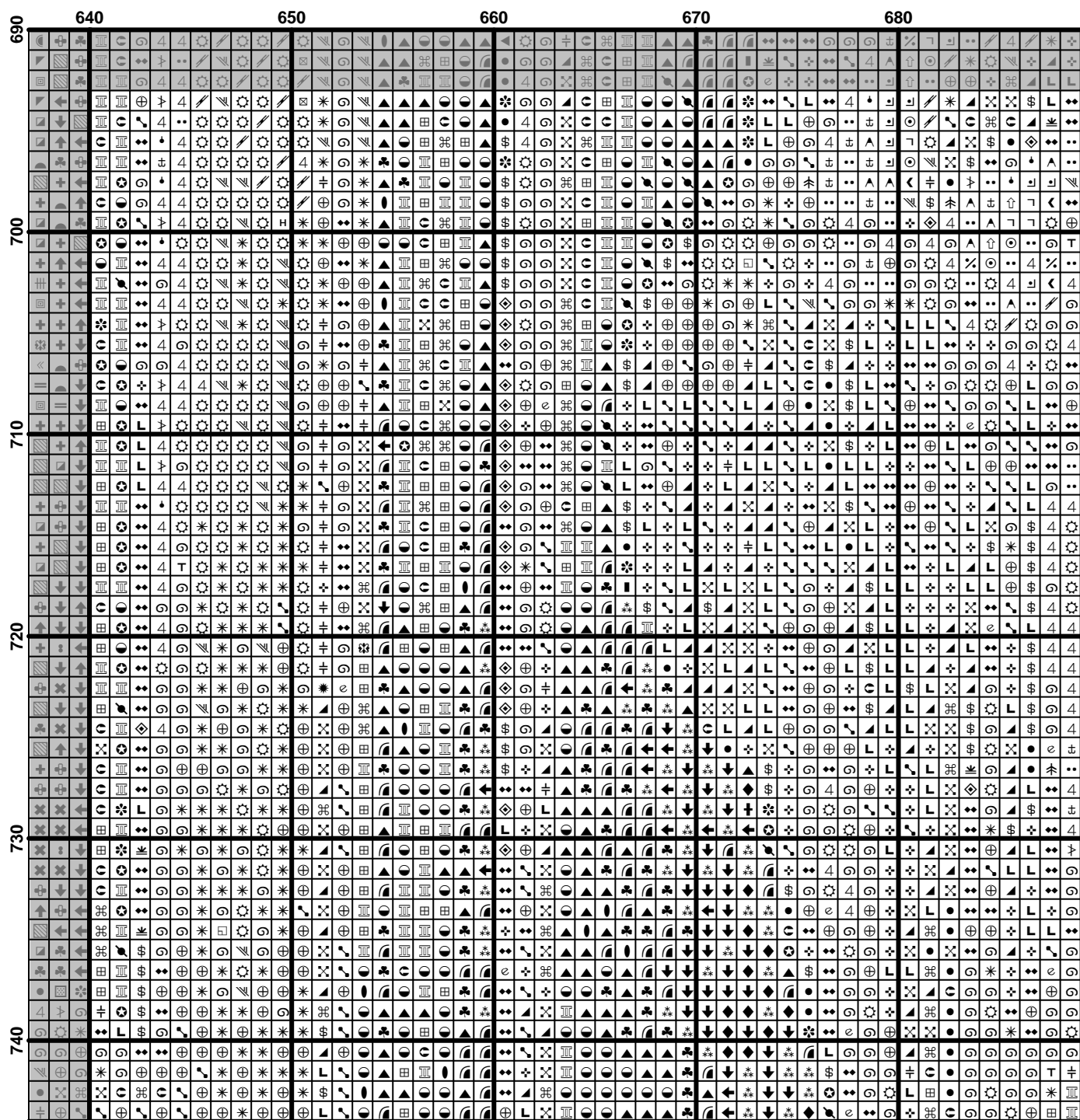












	690										700										710										720										730									
690																																																		
700																																																		
710																																																		
720																																																		
730																																																		

