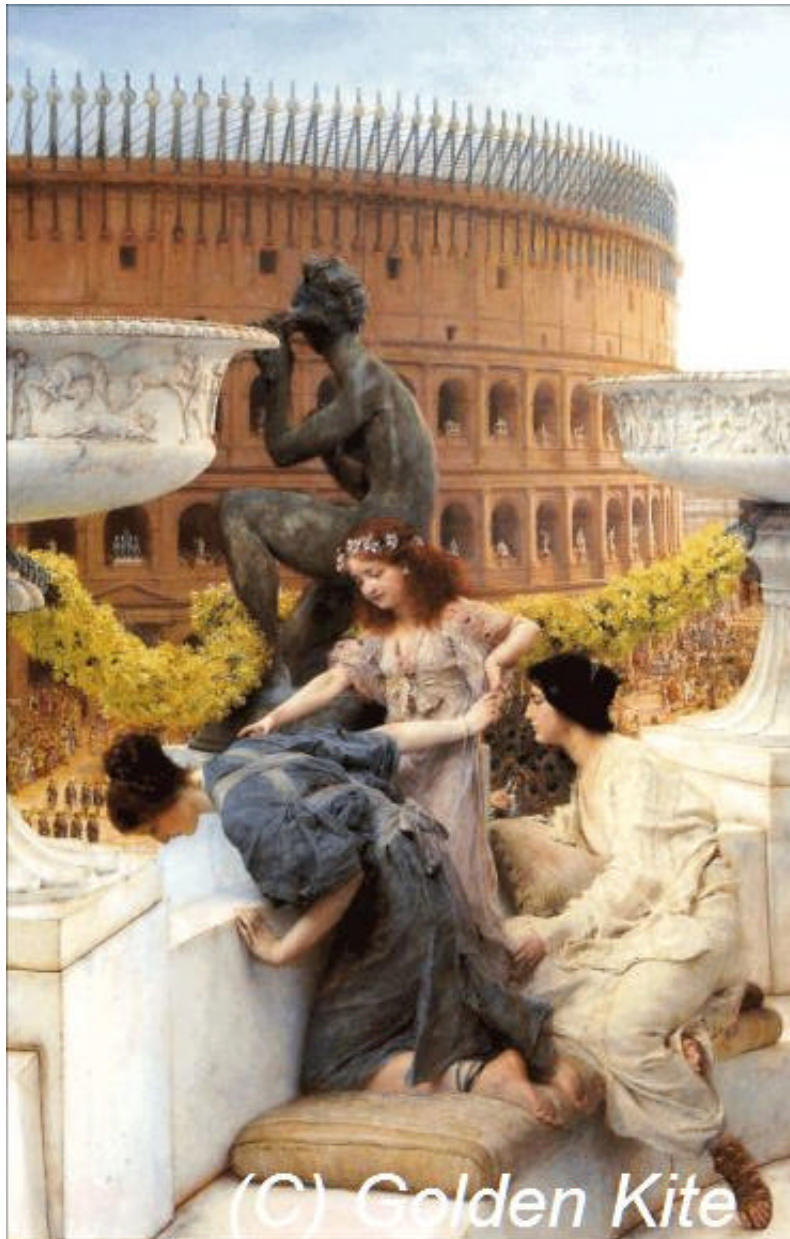


1099 The Coliseum



This pattern may not be copied, sold or in any other way handled in any way that violates the international copyright laws. If you get hold of this pattern (and or this document) in any other way than via a direct download from www.goldenkite.com or via a mail from us, you should report that to us at legal_actions@goldenkite.com .

Copyright (c) 2007-, Golden Kite. All rights reserved.

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.

When you start using this product you agree that Golden Kite (Golden K), or any people working for or in association with Golden Kite (Golden K), cannot be set responsible for any physical, mental, economical or other type of damage caused by this product (including this document, pattern, threads, needles and any other parts received by you from Golden Kite (Golden K)).

This pattern may not be copied, sold or in any other way handled in any way that violates the international copyright laws. If you get hold of this pattern (and or this document) in any other way than via a direct download from www.goldenkite.com or via a mail from us, you should report that to us at legal_actions@goldenkite.com .

The Coliseum

Stitch Count	
Horizontal:	500
Vertical:	780

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:	91	35.67	142	55.6	80	31.21	124	48.65	71	27.75	110	43.25
Including Margins:	107	42	158	62	96	38	140	55	87	34	126	50
	10				12				24			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	127	49.93	198	77.84	106	41.61	165	64.86	53	20.8	82	32.43
Including Margins:	143	56	214	84	122	48	181	71	69	27	98	39
	25				26				27			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	50	19.97	79	31.13	49	19.2	76	29.93	47	18.49	73	28.82
Including Margins:	66	26	95	38	65	26	92	36	63	25	89	35
	28				30				32			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	45	17.83	71	27.8	42	16.64	66	25.94	39	15.6	62	24.32
Including Margins:	61	24	87	34	58	23	82	32	55	22	78	31

Solid Color Stitches. Use two strands of the specified color for these stitches.		
Symbol	DMC	Name
u	1	White 1
H	224	Shell Pink-VY LT
●	317	Pewter Gray
T	318	Steel Gray-LT
⊕	353	Peach
⚡	370	Mustard-MD
▲	372	Mustard-LT
X	407	Desert Sand-DK
⌵	413	Pewter Gray-DK
⚙	414	Steel Gray-DK
c	415	Pearl Gray
⦿	420	Hazelnut Brown-DK
✕	433	Brown-MD
⊗	434	Brown-LT
❖	435	Brown-VY LT
●	436	Tan
⌵	437	Tan-LT
✕	451	Shell Gray-DK
⌵	452	Shell Gray-MD
6	543	Beige Brown-UL VY LT
◇	612	Drab Brown-LT
♣	632	Desert Sand-UL VY DK
▼	645	Beaver Gray-VY DK
⦿	646	Beaver Gray-DK
⊙	647	Beaver Gray-MD
2	648	Beaver Gray-LT
↓	712	Cream
7	725	Topaz
🌿	730	Olive Green-VY DK
⚡	733	Olive Green-MD
#	734	Olive Green-LT
♣	738	Tan-VY LT
0	739	Tan-UL VY LT
4	743	Yellow-MD
△	746	Off White
(747	Sky Blue-VY LT
/	754	Peach-LT
✓	758	Terra Cotta-VY LT
▷	762	Pearl Gray-VY LT
♡	775	Baby Blue-VY LT
Z	783	Topaz-MD
♥	801	Coffee Brown-DK
~	819	Baby Pink-LT
:	822	Beige Gray-LT
☆	827	Blue-VY LT
⦿	831	Golden Olive-MD
H	832	Golden Olive
⚡	833	Golden Olive-LT
↑	834	Golden Olive-VY LT
Ⓢ	838	Beige Brown-VY DK
↓	839	Beige Brown-DK
⊕	841	Beige Brown-LT
	842	Beige Brown-VY LT

🦫	844	Beaver Brown-UL 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
●	938	Coffee Brown-UL DK
⦿	945	Tawny
•	948	Peach-VY LT
◇	950	Desert Sand-LT
)	951	Tawny-LT
➔	975	Golden Brown-DK
..	976	Golden Brown-MD
⚡	977	Golden Brown-LT
⦿	3021	Brown Gray-VY DK
⦿	3022	Brown Gray-MD
⦿	3023	Brown Gray-LT
⦿	3024	Brown Gray-VY LT
△	3033	Mocha Brown-VY LT
♣	3064	Desert Sand
⦿	3072	Beaver Gray-VY LT
■	3371	Black Brown
🌿	3721	Shell Pink-DK
⦿	3753	Antique Blue-UL VY LT
^	3756	Baby Blue-UL VY LT
g	3761	Sky Blue-LT
⌵	3766	Peacock Blue-LT
♣	3768	Gray Green-DK
o	3770	Tawny-VY LT
=	3772	Desert Sand-VY DK
m	3779	Terra Cotta-UL VY LT
⦿	3787	Brown Gray-DK
⦿	3790	Beige Gray-UL DK
●	3799	Pewter Gray-VY DK
⚡	3820	Straw-DK
⌵	3821	Straw
+	3822	Straw-LT
↑	3823	Yellow-UL Pale
🍑	3824	Apricot-LT
○	3825	Pumpkin-Pale
●	3826	Golden Brown
⦿	3827	Golden Brown-Pale
♣	3828	Hazelnut Brown
⦿	3829	Old Gold-VY DK
⌵	3852	Straw-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
田	3864	Mocha Beige-LT
«	3865	Winter White
<	3866	Mocha Brown-UL VY LT

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

Symbol	DMC1	Name1	DMC2	Name2
⌘	840	Beige Brown-MD	3860	Cocoa
⬅	839	Beige Brown-DK	3787	Brown Gray-DK
■	645	Beaver Gray-VY DK	646	Beaver Gray-DK
⋈	950	Desert Sand-LT	842	Beige Brown-VY LT
⌘	712	Cream	3866	Mocha Brown-UL VY LT
●	645	Beaver Gray-VY DK	413	Pewter Gray-DK
○	3078	Golden Yellow-VY LT	754	Peach-LT
☾	370	Mustard-MD	420	Hazelnut Brown-DK
⦿	632	Desert Sand-UL VY DK	839	Beige Brown-DK
⦿	435	Brown-VY LT	3776	Mahogany-LT
✱	3021	Brown Gray-VY DK	3787	Brown Gray-DK
⦿	413	Pewter Gray-DK	3799	Pewter Gray-VY DK
♠	3830	Terra Cotta-MD	3772	Desert Sand-VY DK
▲	356	Terra Cotta-MD	435	Brown-VY LT
⦿	844	Beaver Brown-UL DK	3799	Pewter Gray-VY DK
⦿	407	Desert Sand-DK	758	Terra Cotta-VY LT
✱	926	Gray Green-MD	931	Antique Blue-MD
⦿	317	Pewter Gray	926	Gray Green-MD
⦿	414	Steel Gray-DK	932	Antique Blue-LT
⋈	927	Gray Green-LT	928	Gray Green-VY LT
⦿	3752	Antique Blue-VY LT	3753	Antique Blue-UL VY LT
⦿	3822	Straw-LT	3827	Golden Brown-Pale
▼	3740	Antique Violet-DK	645	Beaver Gray-VY DK
✱	3830	Terra Cotta-MD	435	Brown-VY LT
//	503	Blue Green-MD	414	Steel Gray-DK
⦿	436	Tan	3828	Hazelnut Brown
↓	645	Beaver Gray-VY DK	844	Beaver Brown-UL DK
1	1	White 1	3865	Winter White
⦿	407	Desert Sand-DK	437	Tan-LT
□	712	Cream	762	Pearl Gray-VY LT
⬆	3859	Rosewood-LT	3772	Desert Sand-VY DK
⦿	3021	Brown Gray-VY DK	839	Beige Brown-DK
✱	3776	Mahogany-LT	356	Terra Cotta-MD
::	3856	Mahogany-UL VY LT	758	Terra Cotta-VY LT
e	3024	Brown Gray-VY LT	3072	Beaver Gray-VY LT
×	3864	Mocha Beige-LT	738	Tan-VY LT
⦿	356	Terra Cotta-MD	436	Tan
v	747	Sky Blue-VY LT	3761	Sky Blue-LT
∞	3865	Winter White	747	Sky Blue-VY LT
⦿	841	Beige Brown-LT	223	Shell Pink-LT
⦿	3721	Shell Pink-DK	420	Hazelnut Brown-DK
✱	413	Pewter Gray-DK	926	Gray Green-MD
3	827	Blue-VY LT	3761	Sky Blue-LT
⦿	3022	Brown Gray-MD	3023	Brown Gray-LT
⦿	3752	Antique Blue-VY LT	415	Pearl Gray
n	747	Sky Blue-VY LT	1	White 1
⦿	3022	Brown Gray-MD	842	Beige Brown-VY LT
⬅	3726	Antique Mauve-DK	3863	Mocha Beige-MD
✱	3860	Cocoa	841	Beige Brown-LT
⦿	3824	Apricot-LT	3855	Autumn Gold-LT
=	3824	Apricot-LT	3078	Golden Yellow-VY LT
⦿	437	Tan-LT	3825	Pumpkin-Pale
⦿	402	Mahogany-VY LT	3778	Terra Cotta-LT
L	356	Terra Cotta-MD	3828	Hazelnut Brown

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

III	758	Terra Cotta-VY LT	437	Tan-LT
☞	402	Mahogany-VY LT	437	Tan-LT
▲	632	Desert Sand-UL VY DK	3860	Cocoa
☼	451	Shell Gray-DK	927	Gray Green-LT
➤	3859	Rosewood-LT	612	Drab Brown-LT
▲	370	Mustard-MD	3830	Terra Cotta-MD
●	3772	Desert Sand-VY DK	611	Drab Brown
✱	301	Mahogany-MD	370	Mustard-MD
L	3024	Brown Gray-VY LT	3770	Tawny-VY LT
☞	950	Desert Sand-LT	951	Tawny-LT
☼	452	Shell Gray-MD	950	Desert Sand-LT
—	452	Shell Gray-MD	3072	Beaver Gray-VY LT
II	928	Gray Green-VY LT	452	Shell Gray-MD
V	950	Desert Sand-LT	3023	Brown Gray-LT
▲	414	Steel Gray-DK	451	Shell Gray-DK
✱	840	Beige Brown-MD	451	Shell Gray-DK
▶	3860	Cocoa	451	Shell Gray-DK
◎	834	Golden Olive-VY LT	783	Topaz-MD
☞	3822	Straw-LT	3854	Autumn Gold-MD
☼	832	Golden Olive	783	Topaz-MD
◆	300	Mahogany-VY DK	355	Terra Cotta-DK
▲	632	Desert Sand-UL VY DK	300	Mahogany-VY DK
◀	370	Mustard-MD	612	Drab Brown-LT
φ	434	Brown-LT	3826	Golden Brown
■	223	Shell Pink-LT	434	Brown-LT
☞	3861	Cocoa-LT	452	Shell Gray-MD
5	543	Beige Brown-UL VY LT	950	Desert Sand-LT
I	3823	Yellow-UL Pale	3866	Mocha Brown-UL VY LT
◇	739	Tan-UL VY LT	950	Desert Sand-LT
♠	3863	Mocha Beige-MD	841	Beige Brown-LT
➤	3823	Yellow-UL Pale	822	Beige Gray-LT
✕	927	Gray Green-LT	3041	Antique Violet-MD
★	612	Drab Brown-LT	301	Mahogany-MD
☼	372	Mustard-LT	3064	Desert Sand
☼	3859	Rosewood-LT	3064	Desert Sand
+	646	Beaver Gray-DK	3740	Antique Violet-DK
☼	414	Steel Gray-DK	647	Beaver Gray-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	4537	1786	4321	1701	3889	1531
223	Shell Pink-LT	718	282	684	269	615	242
224	Shell Pink-VY LT	184	72	175	68	157	61
300	Mahogany-VY DK	143	56	136	53	123	48
301	Mahogany-MD	617	242	588	231	529	208
317	Pewter Gray	408	160	388	152	349	137
318	Steel Gray-LT	155	61	148	58	133	52
353	Peach	74	29	71	27	64	25
355	Terra Cotta-DK	18	7	18	7	16	6
356	Terra Cotta-MD	1208	475	1150	452	1035	407
370	Mustard-MD	995	391	948	373	853	335
372	Mustard-LT	354	139	337	132	304	119
402	Mahogany-VY LT	334	131	318	125	286	112
407	Desert Sand-DK	1515	596	1443	568	1298	511
413	Pewter Gray-DK	841	331	801	315	721	283
414	Steel Gray-DK	807	317	769	302	692	272
415	Pearl Gray	435	171	414	162	373	146
420	Hazelnut Brown-DK	648	255	618	243	556	218
433	Brown-MD	180	70	171	67	154	60
434	Brown-LT	814	320	775	305	698	274
435	Brown-VY LT	578	227	551	216	496	195
436	Tan	859	338	818	322	736	289
437	Tan-LT	1224	481	1166	459	1049	412
451	Shell Gray-DK	958	377	913	359	821	323
452	Shell Gray-MD	2883	1135	2746	1081	2471	972
503	Blue Green-MD	149	58	142	55	127	50
543	Beige Brown-UL VY LT	1142	449	1087	427	979	385
611	Drab Brown	248	97	236	92	213	83
612	Drab Brown-LT	1264	497	1204	474	1083	426
632	Desert Sand-UL VY DK	1620	637	1543	607	1389	546
645	Beaver Gray-VY DK	1273	501	1212	477	1091	429
646	Beaver Gray-DK	473	186	451	177	406	159
647	Beaver Gray-MD	434	170	413	162	372	146
648	Beaver Gray-LT	930	366	886	348	797	313
712	Cream	2517	990	2397	943	2158	849
725	Topaz	81	31	77	30	70	27
730	Olive Green-VY DK	95	37	91	35	82	32
733	Olive Green-MD	104	40	99	38	89	35
734	Olive Green-LT	99	38	95	37	85	33
738	Tan-VY LT	799	314	761	299	684	269
739	Tan-UL VY LT	529	208	504	198	454	178
743	Yellow-MD	101	39	97	38	87	34
746	Off White	1410	555	1343	528	1209	475
747	Sky Blue-VY LT	5836	2297	5558	2188	5002	1969
754	Peach-LT	168	66	160	62	144	56
758	Terra Cotta-VY LT	1193	469	1137	447	1023	402
762	Pearl Gray-VY LT	959	377	913	359	822	323
775	Baby Blue-VY LT	315	124	300	118	270	106
783	Topaz-MD	500	196	476	187	428	168
801	Coffee Brown-DK	445	175	424	166	382	150
819	Baby Pink-LT	1419	558	1351	531	1216	478
822	Beige Gray-LT	904	355	861	338	775	305
827	Blue-VY LT	472	185	449	176	404	159
831	Golden Olive-MD	194	76	185	72	166	65

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

832	Golden Olive	430	169	409	161	368	144
833	Golden Olive-LT	209	82	199	78	179	70
834	Golden Olive-VY LT	293	115	279	109	251	98
838	Beige Brown-VY DK	1073	422	1022	402	920	362
839	Beige Brown-DK	1980	779	1885	742	1697	668
840	Beige Brown-MD	433	170	413	162	371	146
841	Beige Brown-LT	1554	611	1480	582	1332	524
842	Beige Brown-VY LT	1745	687	1662	654	1496	588
844	Beaver Brown-UL DK	1903	749	1812	713	1631	642
926	Gray Green-MD	541	212	515	202	464	182
927	Gray Green-LT	1506	592	1435	564	1291	508
928	Gray Green-VY LT	1434	564	1366	537	1229	483
931	Antique Blue-MD	242	95	230	90	207	81
932	Antique Blue-LT	341	134	325	127	292	114
934	Black Avocado Green	464	182	442	174	398	156
938	Coffee Brown-UL DK	1566	616	1492	587	1343	528
945	Tawny	359	141	342	134	308	121
948	Peach-VY LT	394	155	376	148	338	133
950	Desert Sand-LT	2307	908	2197	864	1977	778
951	Tawny-LT	534	210	508	200	457	179
975	Golden Brown-DK	137	53	130	51	117	46
976	Golden Brown-MD	109	42	104	40	93	36
977	Golden Brown-LT	205	80	195	76	176	69
3021	Brown Gray-VY DK	1791	705	1706	671	1535	604
3022	Brown Gray-MD	647	254	616	242	554	218
3023	Brown Gray-LT	1378	542	1312	516	1181	464
3024	Brown Gray-VY LT	2175	856	2072	815	1864	733
3033	Mocha Brown-VY LT	189	74	180	70	162	63
3041	Antique Violet-MD	121	47	116	45	104	40
3064	Desert Sand	1490	586	1419	558	1277	502
3072	Beaver Gray-VY LT	2122	835	2020	795	1818	715
3078	Golden Yellow-VY LT	230	90	219	86	197	77
3371	Black Brown	1577	620	1502	591	1352	532
3721	Shell Pink-DK	294	115	280	110	252	99
3726	Antique Mauve-DK	228	89	217	85	195	76
3740	Antique Violet-DK	379	149	361	142	324	127
3752	Antique Blue-VY LT	279	109	265	104	239	94
3753	Antique Blue-UL VY LT	602	237	573	225	516	203
3756	Baby Blue-UL VY LT	797	313	759	298	683	268
3761	Sky Blue-LT	1722	677	1640	645	1476	581
3766	Peacock Blue-LT	104	40	99	38	89	35
3768	Gray Green-DK	145	57	138	54	124	48
3770	Tawny-VY LT	1552	611	1478	581	1330	523
3772	Desert Sand-VY DK	2087	821	1987	782	1788	703
3776	Mahogany-LT	82	32	78	30	70	27
3778	Terra Cotta-LT	159	62	151	59	136	53
3779	Terra Cotta-UL VY LT	191	75	182	71	164	64
3787	Brown Gray-DK	1259	495	1199	472	1079	424
3790	Beige Gray-UL DK	341	134	325	127	292	114
3799	Pewter Gray-VY DK	1477	581	1406	553	1266	498
3820	Straw-DK	274	107	261	102	235	92
3821	Straw	94	37	89	35	80	31
3822	Straw-LT	214	84	204	80	183	72
3823	Yellow-UL Pale	1067	420	1016	400	914	359
3824	Apricot-LT	400	157	381	150	343	135
3825	Pumpkin-Pale	206	81	196	77	177	69
3826	Golden Brown	213	83	203	79	183	72
3827	Golden Brown-Pale	196	77	187	73	168	66
3828	Hazelnut Brown	916	360	872	343	785	309

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

3829	Old Gold-VY DK	212	83	202	79	182	71
3830	Terra Cotta-MD	581	228	554	218	498	196
3852	Straw-VY DK	250	98	238	93	214	84
3854	Autumn Gold-MD	179	70	170	66	153	60
3855	Autumn Gold-LT	339	133	323	127	290	114
3856	Mahogany-UL VY LT	715	281	681	268	613	241
3859	Rosewood-LT	1840	724	1752	689	1577	620
3860	Cocoa	1567	616	1492	587	1343	528
3861	Cocoa-LT	1018	400	969	381	872	343
3862	Mocha Beige-DK	704	277	671	264	604	237
3863	Mocha Beige-MD	1109	436	1057	416	951	374
3864	Mocha Beige-LT	1627	640	1549	609	1394	548
3865	Winter White	4357	1715	4150	1633	3735	1470
3866	Mocha Brown-UL VY LT	1583	623	1507	593	1356	533

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		10		12		24	
1	White 1	7000	2756	5834	2297	2917	1148
223	Shell Pink-LT	1107	436	923	363	461	182
224	Shell Pink-VY LT	283	110	236	92	118	46
300	Mahogany-VY DK	221	86	185	72	92	36
301	Mahogany-MD	952	374	794	312	397	156
317	Pewter Gray	628	247	524	206	262	103
318	Steel Gray-LT	239	94	200	78	100	39
353	Peach	115	45	96	38	48	19
355	Terra Cotta-DK	29	11	24	9	12	5
356	Terra Cotta-MD	1863	733	1553	611	776	305
370	Mustard-MD	1535	603	1280	503	640	251
372	Mustard-LT	547	214	456	179	228	89
402	Mahogany-VY LT	515	202	429	168	215	84
407	Desert Sand-DK	2336	920	1947	767	974	383
413	Pewter Gray-DK	1298	509	1082	425	541	212
414	Steel Gray-DK	1246	490	1038	408	519	204
415	Pearl Gray	671	263	560	219	280	110
420	Hazelnut Brown-DK	1001	392	834	327	417	164
433	Brown-MD	277	108	231	90	116	45
434	Brown-LT	1256	493	1047	411	524	206
435	Brown-VY LT	893	351	744	293	372	146
436	Tan	1325	520	1104	434	552	217
437	Tan-LT	1888	742	1574	618	787	309
451	Shell Gray-DK	1478	581	1232	485	616	242
452	Shell Gray-MD	4448	1750	3707	1458	1853	729
503	Blue Green-MD	229	90	191	75	95	38
543	Beige Brown-UL VY LT	1762	693	1469	578	734	289
611	Drab Brown	383	149	320	125	160	62
612	Drab Brown-LT	1949	767	1625	639	812	320
632	Desert Sand-UL VY DK	2500	983	2084	819	1042	410
645	Beaver Gray-VY DK	1964	772	1637	644	818	322
646	Beaver Gray-DK	731	286	609	239	305	119
647	Beaver Gray-MD	670	263	558	219	279	110
648	Beaver Gray-LT	1435	563	1196	470	598	235
712	Cream	3884	1528	3237	1274	1619	637
725	Topaz	126	49	105	41	53	20
730	Olive Green-VY DK	148	58	123	48	62	24
733	Olive Green-MD	160	63	134	53	67	26

734	Olive Green-LT	153	59	128	50	64	25
738	Tan-VY LT	1231	484	1026	404	513	202
739	Tan-UL VY LT	817	320	681	267	341	134
743	Yellow-MD	157	61	131	51	65	26
746	Off White	2176	855	1814	713	907	356
747	Sky Blue-VY LT	9004	3544	7503	2954	3752	1477
754	Peach-LT	259	101	216	84	108	42
758	Terra Cotta-VY LT	1841	724	1535	603	767	302
762	Pearl Gray-VY LT	1480	581	1233	485	617	242
775	Baby Blue-VY LT	486	191	405	159	203	80
783	Topaz-MD	770	302	642	252	321	126
801	Coffee Brown-DK	688	270	573	225	287	113
819	Baby Pink-LT	2189	860	1824	717	912	359
822	Beige Gray-LT	1395	549	1163	458	581	229
827	Blue-VY LT	727	286	606	239	303	119
831	Golden Olive-MD	299	117	249	98	125	49
832	Golden Olive	662	259	552	216	276	108
833	Golden Olive-LT	322	126	269	105	134	53
834	Golden Olive-VY LT	452	176	377	147	188	74
838	Beige Brown-VY DK	1656	652	1380	543	690	272
839	Beige Brown-DK	3055	1202	2546	1002	1273	501
840	Beige Brown-MD	668	263	557	219	278	110
841	Beige Brown-LT	2398	943	1998	786	999	393
842	Beige Brown-VY LT	2693	1058	2244	882	1122	441
844	Beaver Brown-UL DK	2936	1156	2447	963	1223	482
926	Gray Green-MD	835	328	696	273	348	137
927	Gray Green-LT	2324	914	1937	762	968	381
928	Gray Green-VY LT	2212	869	1844	725	922	362
931	Antique Blue-MD	373	146	311	122	155	61
932	Antique Blue-LT	526	205	438	171	219	86
934	Black Avocado Green	716	281	597	234	299	117
938	Coffee Brown-UL DK	2417	950	2015	792	1007	396
945	Tawny	554	218	462	182	231	91
948	Peach-VY LT	608	239	507	200	254	100
950	Desert Sand-LT	3559	1400	2966	1167	1483	584
951	Tawny-LT	823	322	686	269	343	134
975	Golden Brown-DK	211	83	176	69	88	35
976	Golden Brown-MD	167	65	140	54	70	27
977	Golden Brown-LT	317	124	264	104	132	52
3021	Brown Gray-VY DK	2763	1087	2303	906	1151	453
3022	Brown Gray-MD	997	392	831	327	416	164
3023	Brown Gray-LT	2126	835	1772	696	886	348
3024	Brown Gray-VY LT	3355	1319	2796	1100	1398	550
3033	Mocha Brown-VY LT	292	113	243	95	122	47
3041	Antique Violet-MD	187	72	156	60	78	30
3064	Desert Sand	2299	904	1916	753	958	377
3072	Beaver Gray-VY LT	3272	1287	2727	1073	1364	536
3078	Golden Yellow-VY LT	355	139	296	116	148	58
3371	Black Brown	2434	958	2028	798	1014	399
3721	Shell Pink-DK	454	178	378	149	189	74
3726	Antique Mauve-DK	351	137	293	114	146	57
3740	Antique Violet-DK	583	229	486	191	243	95
3752	Antique Blue-VY LT	430	169	359	141	179	71
3753	Antique Blue-UL VY LT	929	365	774	305	387	152
3756	Baby Blue-UL VY LT	1229	482	1025	402	512	201
3761	Sky Blue-LT	2657	1046	2214	872	1107	436
3766	Peacock Blue-LT	160	63	134	53	67	26
3768	Gray Green-DK	223	86	186	72	93	36
3770	Tawny-VY LT	2394	941	1995	785	998	392

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

3772	Desert Sand-VY DK	3218	1265	2682	1055	1341	527
3776	Mahogany-LT	126	49	105	41	53	20
3778	Terra Cotta-LT	245	95	204	80	102	40
3779	Terra Cotta-UL VY LT	295	115	246	96	123	48
3787	Brown Gray-DK	1942	763	1619	636	809	318
3790	Beige Gray-UL DK	526	205	438	171	219	86
3799	Pewter Gray-VY DK	2279	896	1899	747	950	374
3820	Straw-DK	423	166	353	138	176	69
3821	Straw	144	56	120	47	60	23
3822	Straw-LT	329	130	275	108	137	54
3823	Yellow-UL Pale	1645	646	1371	539	686	269
3824	Apricot-LT	617	243	515	203	257	101
3825	Pumpkin-Pale	319	124	266	104	133	52
3826	Golden Brown	329	130	275	108	137	54
3827	Golden Brown-Pale	302	119	252	99	126	50
3828	Hazelnut Brown	1413	556	1178	464	589	232
3829	Old Gold-VY DK	328	128	273	107	137	53
3830	Terra Cotta-MD	896	353	747	294	374	147
3852	Straw-VY DK	385	151	321	126	161	63
3854	Autumn Gold-MD	275	108	230	90	115	45
3855	Autumn Gold-LT	522	205	435	171	218	86
3856	Mahogany-UL VY LT	1103	434	920	362	460	181
3859	Rosewood-LT	2839	1116	2366	930	1183	465
3860	Cocoa	2417	950	2015	792	1007	396
3861	Cocoa-LT	1570	617	1308	515	654	257
3862	Mocha Beige-DK	1087	427	906	356	453	178
3863	Mocha Beige-MD	1712	673	1427	561	713	281
3864	Mocha Beige-LT	2509	986	2091	822	1046	411
3865	Winter White	6723	2646	5603	2205	2801	1103
3866	Mocha Brown-UL VY LT	2441	959	2034	800	1017	400

Extended thread usage table.							
DMC	Name	Usage (cm)		Usage (inch)		Usage (cm)	
		25		26		27	
1	White 1	2800	1102	2692	1060	2593	1021
223	Shell Pink-LT	443	174	426	168	410	161
224	Shell Pink-VY LT	113	44	109	42	105	41
300	Mahogany-VY DK	89	35	85	33	82	32
301	Mahogany-MD	381	150	366	144	353	139
317	Pewter Gray	251	99	242	95	233	91
318	Steel Gray-LT	96	37	92	36	89	35
353	Peach	46	18	44	17	43	17
355	Terra Cotta-DK	12	4	11	4	11	4
356	Terra Cotta-MD	745	293	717	282	690	271
370	Mustard-MD	614	241	591	232	569	223
372	Mustard-LT	219	86	210	82	203	79
402	Mahogany-VY LT	206	81	198	78	191	75
407	Desert Sand-DK	935	368	899	354	865	341
413	Pewter Gray-DK	519	204	499	196	481	189
414	Steel Gray-DK	498	196	479	188	461	181
415	Pearl Gray	269	105	258	101	249	97
420	Hazelnut Brown-DK	400	157	385	151	371	145
433	Brown-MD	111	43	107	42	103	40
434	Brown-LT	503	197	483	190	465	183
435	Brown-VY LT	357	140	343	135	331	130
436	Tan	530	208	510	200	491	193

437	Tan-LT	755	297	726	285	699	275
451	Shell Gray-DK	591	233	568	224	547	215
452	Shell Gray-MD	1779	700	1711	673	1647	648
503	Blue Green-MD	91	36	88	35	85	33
543	Beige Brown-UL VY LT	705	277	678	267	653	257
611	Drab Brown	153	60	147	57	142	55
612	Drab Brown-LT	780	307	750	295	722	284
632	Desert Sand-UL VY DK	1000	393	962	378	926	364
645	Beaver Gray-VY DK	786	309	755	297	727	286
646	Beaver Gray-DK	292	114	281	110	271	106
647	Beaver Gray-MD	268	105	258	101	248	97
648	Beaver Gray-LT	574	225	552	217	531	209
712	Cream	1554	611	1494	588	1439	566
725	Topaz	50	19	48	19	47	18
730	Olive Green-VY DK	59	23	57	22	55	21
733	Olive Green-MD	64	25	62	24	59	23
734	Olive Green-LT	61	24	59	23	57	22
738	Tan-VY LT	492	194	474	186	456	179
739	Tan-UL VY LT	327	128	314	123	303	119
743	Yellow-MD	63	24	60	24	58	23
746	Off White	870	342	837	329	806	317
747	Sky Blue-VY LT	3601	1418	3463	1363	3335	1313
754	Peach-LT	104	40	100	39	96	37
758	Terra Cotta-VY LT	737	289	708	278	682	268
762	Pearl Gray-VY LT	592	233	569	224	548	215
775	Baby Blue-VY LT	194	76	187	73	180	71
783	Topaz-MD	308	121	296	116	285	112
801	Coffee Brown-DK	275	108	264	104	255	100
819	Baby Pink-LT	876	344	842	331	811	319
822	Beige Gray-LT	558	220	537	211	517	203
827	Blue-VY LT	291	114	280	110	269	106
831	Golden Olive-MD	120	47	115	45	111	43
832	Golden Olive	265	104	255	100	245	96
833	Golden Olive-LT	129	50	124	48	119	47
834	Golden Olive-VY LT	181	71	174	68	167	65
838	Beige Brown-VY DK	662	261	637	251	613	241
839	Beige Brown-DK	1222	481	1175	462	1131	445
840	Beige Brown-MD	267	105	257	101	247	97
841	Beige Brown-LT	959	377	922	363	888	349
842	Beige Brown-VY LT	1077	423	1036	407	997	392
844	Beaver Brown-UL DK	1174	462	1129	444	1087	428
926	Gray Green-MD	334	131	321	126	309	121
927	Gray Green-LT	930	366	894	352	861	339
928	Gray Green-VY LT	885	348	851	334	819	322
931	Antique Blue-MD	149	58	143	56	138	54
932	Antique Blue-LT	210	82	202	79	195	76
934	Black Avocado Green	287	112	276	108	265	104
938	Coffee Brown-UL DK	967	380	930	366	895	352
945	Tawny	222	87	213	84	205	81
948	Peach-VY LT	243	96	234	92	225	89
950	Desert Sand-LT	1423	560	1369	539	1318	519
951	Tawny-LT	329	129	316	124	305	119
975	Golden Brown-DK	84	33	81	32	78	31
976	Golden Brown-MD	67	26	64	25	62	24
977	Golden Brown-LT	127	50	122	48	117	46
3021	Brown Gray-VY DK	1105	435	1063	418	1023	403
3022	Brown Gray-MD	399	157	384	151	369	145
3023	Brown Gray-LT	850	334	818	321	787	309
3024	Brown Gray-VY LT	1342	528	1290	507	1243	489

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

3033	Mocha Brown-VY LT	117	45	112	44	108	42
3041	Antique Violet-MD	75	29	72	28	69	27
3064	Desert Sand	919	361	884	348	851	335
3072	Beaver Gray-VY LT	1309	515	1259	495	1212	477
3078	Golden Yellow-VY LT	142	55	136	53	131	51
3371	Black Brown	973	383	936	368	901	355
3721	Shell Pink-DK	181	71	174	69	168	66
3726	Antique Mauve-DK	140	55	135	53	130	51
3740	Antique Violet-DK	233	91	224	88	216	85
3752	Antique Blue-VY LT	172	68	165	65	159	63
3753	Antique Blue-UL VY LT	372	146	357	141	344	135
3756	Baby Blue-UL VY LT	492	193	473	186	455	179
3761	Sky Blue-LT	1063	418	1022	402	984	387
3766	Peacock Blue-LT	64	25	62	24	59	23
3768	Gray Green-DK	89	35	86	33	83	32
3770	Tawny-VY LT	958	377	921	362	887	349
3772	Desert Sand-VY DK	1287	506	1238	487	1192	469
3776	Mahogany-LT	50	19	48	19	47	18
3778	Terra Cotta-LT	98	38	94	37	91	35
3779	Terra Cotta-UL VY LT	118	46	114	44	109	43
3787	Brown Gray-DK	777	305	747	294	719	283
3790	Beige Gray-UL DK	210	82	202	79	195	76
3799	Pewter Gray-VY DK	912	359	876	345	844	332
3820	Straw-DK	169	66	163	64	157	61
3821	Straw	58	22	55	21	53	21
3822	Straw-LT	132	52	127	50	122	48
3823	Yellow-UL Pale	658	258	633	249	609	239
3824	Apricot-LT	247	97	237	93	229	90
3825	Pumpkin-Pale	127	50	123	48	118	46
3826	Golden Brown	132	52	127	50	122	48
3827	Golden Brown-Pale	121	48	116	46	112	44
3828	Hazelnut Brown	565	222	543	214	523	206
3829	Old Gold-VY DK	131	51	126	49	121	47
3830	Terra Cotta-MD	359	141	345	136	332	131
3852	Straw-VY DK	154	60	148	58	143	56
3854	Autumn Gold-MD	110	43	106	42	102	40
3855	Autumn Gold-LT	209	82	201	79	193	76
3856	Mahogany-UL VY LT	441	174	424	167	409	161
3859	Rosewood-LT	1135	446	1092	429	1051	413
3860	Cocoa	967	380	930	366	895	352
3861	Cocoa-LT	628	247	604	237	581	229
3862	Mocha Beige-DK	435	171	418	164	403	158
3863	Mocha Beige-MD	685	269	658	259	634	249
3864	Mocha Beige-LT	1004	395	965	379	929	365
3865	Winter White	2689	1058	2586	1018	2490	980
3866	Mocha Brown-UL VY LT	976	384	939	369	904	355

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		28		30		32	
1	White 1	2500	984	2333	919	2188	861
223	Shell Pink-LT	395	156	369	145	346	136
224	Shell Pink-VY LT	101	39	94	37	88	34
300	Mahogany-VY DK	79	31	74	29	69	27
301	Mahogany-MD	340	134	317	125	298	117
317	Pewter Gray	224	88	209	82	196	77
318	Steel Gray-LT	86	33	80	31	75	29

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

353	Peach	41	16	38	15	36	14
355	Terra Cotta-DK	10	4	10	4	9	3
356	Terra Cotta-MD	665	262	621	244	582	229
370	Mustard-MD	548	215	512	201	480	188
372	Mustard-LT	195	77	182	71	171	67
402	Mahogany-VY LT	184	72	172	67	161	63
407	Desert Sand-DK	834	329	779	307	730	287
413	Pewter Gray-DK	464	182	433	170	406	159
414	Steel Gray-DK	445	175	415	163	389	153
415	Pearl Gray	240	94	224	88	210	82
420	Hazelnut Brown-DK	357	140	334	131	313	123
433	Brown-MD	99	39	92	36	87	34
434	Brown-LT	449	176	419	164	393	154
435	Brown-VY LT	319	125	298	117	279	110
436	Tan	473	186	442	173	414	163
437	Tan-LT	674	265	629	247	590	232
451	Shell Gray-DK	528	208	493	194	462	182
452	Shell Gray-MD	1589	625	1483	583	1390	547
503	Blue Green-MD	82	32	76	30	71	28
543	Beige Brown-UL VY LT	629	248	587	231	551	217
611	Drab Brown	137	53	128	50	120	47
612	Drab Brown-LT	696	274	650	256	609	240
632	Desert Sand-UL VY DK	893	351	833	328	781	307
645	Beaver Gray-VY DK	701	276	655	257	614	241
646	Beaver Gray-DK	261	102	244	95	228	89
647	Beaver Gray-MD	239	94	223	88	209	82
648	Beaver Gray-LT	512	201	478	188	448	176
712	Cream	1387	546	1295	509	1214	478
725	Topaz	45	17	42	16	39	15
730	Olive Green-VY DK	53	21	49	19	46	18
733	Olive Green-MD	57	23	53	21	50	20
734	Olive Green-LT	55	21	51	20	48	19
738	Tan-VY LT	440	173	410	161	385	151
739	Tan-UL VY LT	292	114	272	107	255	100
743	Yellow-MD	56	22	52	20	49	19
746	Off White	777	305	725	285	680	267
747	Sky Blue-VY LT	3216	1266	3001	1181	2814	1108
754	Peach-LT	93	36	86	34	81	32
758	Terra Cotta-VY LT	658	258	614	241	575	226
762	Pearl Gray-VY LT	528	208	493	194	462	182
775	Baby Blue-VY LT	174	68	162	64	152	60
783	Topaz-MD	275	108	257	101	241	95
801	Coffee Brown-DK	246	96	229	90	215	84
819	Baby Pink-LT	782	307	730	287	684	269
822	Beige Gray-LT	498	196	465	183	436	172
827	Blue-VY LT	260	102	242	95	227	89
831	Golden Olive-MD	107	42	100	39	93	37
832	Golden Olive	237	93	221	86	207	81
833	Golden Olive-LT	115	45	107	42	101	39
834	Golden Olive-VY LT	161	63	151	59	141	55
838	Beige Brown-VY DK	591	233	552	217	518	204
839	Beige Brown-DK	1091	429	1018	401	955	376
840	Beige Brown-MD	239	94	223	88	209	82
841	Beige Brown-LT	856	337	799	314	749	295
842	Beige Brown-VY LT	962	378	898	353	842	331
844	Beaver Brown-UL DK	1049	413	979	385	917	361
926	Gray Green-MD	298	117	278	109	261	102
927	Gray Green-LT	830	327	775	305	726	286
928	Gray Green-VY LT	790	311	737	290	691	272

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

931	Antique Blue-MD	133	52	124	49	116	46
932	Antique Blue-LT	188	73	175	68	164	64
934	Black Avocado Green	256	100	239	94	224	88
938	Coffee Brown-UL DK	863	339	806	317	755	297
945	Tawny	198	78	185	73	173	68
948	Peach-VY LT	217	86	203	80	190	75
950	Desert Sand-LT	1271	500	1186	467	1112	438
951	Tawny-LT	294	115	274	107	257	101
975	Golden Brown-DK	75	30	70	28	66	26
976	Golden Brown-MD	60	23	56	22	52	20
977	Golden Brown-LT	113	44	106	41	99	39
3021	Brown Gray-VY DK	987	388	921	362	863	340
3022	Brown Gray-MD	356	140	332	131	312	123
3023	Brown Gray-LT	759	298	709	278	664	261
3024	Brown Gray-VY LT	1198	471	1118	440	1049	412
3033	Mocha Brown-VY LT	104	41	97	38	91	35
3041	Antique Violet-MD	67	26	62	24	59	23
3064	Desert Sand	821	323	766	301	718	282
3072	Beaver Gray-VY LT	1169	460	1091	429	1023	402
3078	Golden Yellow-VY LT	127	50	118	46	111	43
3371	Black Brown	869	342	811	319	761	299
3721	Shell Pink-DK	162	64	151	59	142	56
3726	Antique Mauve-DK	125	49	117	46	110	43
3740	Antique Violet-DK	208	82	194	76	182	71
3752	Antique Blue-VY LT	154	60	143	56	134	53
3753	Antique Blue-UL VY LT	332	131	310	122	290	114
3756	Baby Blue-UL VY LT	439	172	410	161	384	151
3761	Sky Blue-LT	949	374	886	349	830	327
3766	Peacock Blue-LT	57	23	53	21	50	20
3768	Gray Green-DK	80	31	74	29	70	27
3770	Tawny-VY LT	855	336	798	314	748	294
3772	Desert Sand-VY DK	1149	452	1073	422	1006	395
3776	Mahogany-LT	45	17	42	16	39	15
3778	Terra Cotta-LT	87	34	82	32	77	30
3779	Terra Cotta-UL VY LT	105	41	98	38	92	36
3787	Brown Gray-DK	694	273	647	254	607	239
3790	Beige Gray-UL DK	188	73	175	68	164	64
3799	Pewter Gray-VY DK	814	320	760	299	712	280
3820	Straw-DK	151	59	141	55	132	52
3821	Straw	51	20	48	19	45	17
3822	Straw-LT	118	46	110	43	103	41
3823	Yellow-UL Pale	588	231	548	215	514	202
3824	Apricot-LT	221	87	206	81	193	76
3825	Pumpkin-Pale	114	44	106	41	100	39
3826	Golden Brown	118	46	110	43	103	41
3827	Golden Brown-Pale	108	42	101	40	95	37
3828	Hazelnut Brown	505	199	471	185	442	174
3829	Old Gold-VY DK	117	46	109	43	102	40
3830	Terra Cotta-MD	320	126	299	118	280	110
3852	Straw-VY DK	138	54	128	50	120	47
3854	Autumn Gold-MD	98	39	92	36	86	34
3855	Autumn Gold-LT	186	73	174	68	163	64
3856	Mahogany-UL VY LT	394	155	368	145	345	136
3859	Rosewood-LT	1014	399	946	372	887	349
3860	Cocoa	863	339	806	317	755	297
3861	Cocoa-LT	561	221	523	206	491	193
3862	Mocha Beige-DK	388	152	362	142	340	133
3863	Mocha Beige-MD	611	240	571	224	535	210
3864	Mocha Beige-LT	896	352	836	329	784	308

Copyright (c) 2007-, Golden Kite (Golden K.)

Internet: www.goldenkite.com

e-mail: info@goldenkite.com

3865	Winter White	2401	945	2241	882	2101	827
3866	Mocha Brown-UL VY LT	872	343	814	320	763	300

[illegible]

$$(12) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} g(s) ds + \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} h(s) ds$$

$$(13) \quad \frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$$

$$(14) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} g(s) ds + \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} h(s) ds$$

$$(15) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} g(s) ds + \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} h(s) ds$$

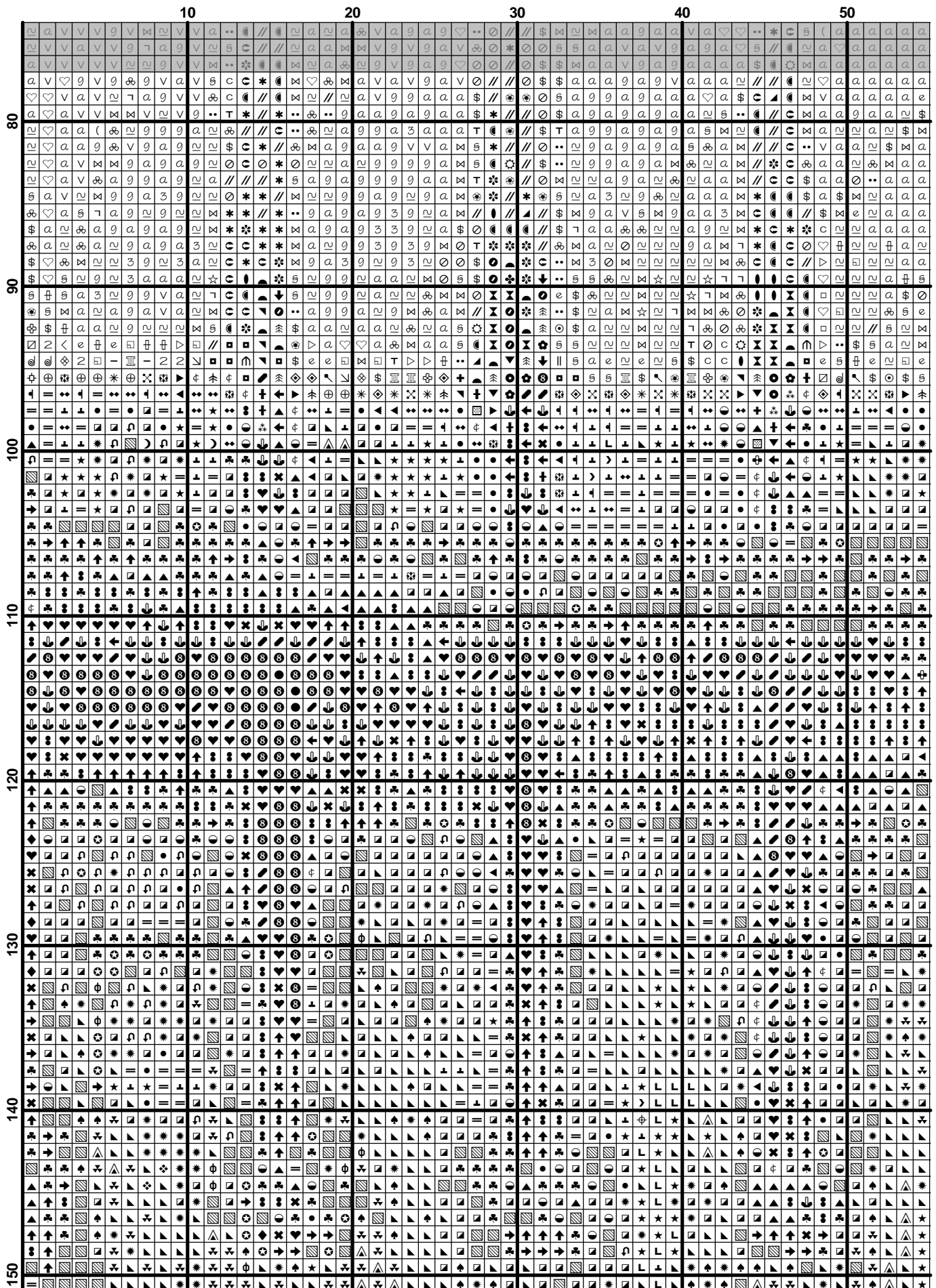
[illegible]

[illegible]

[illegible]

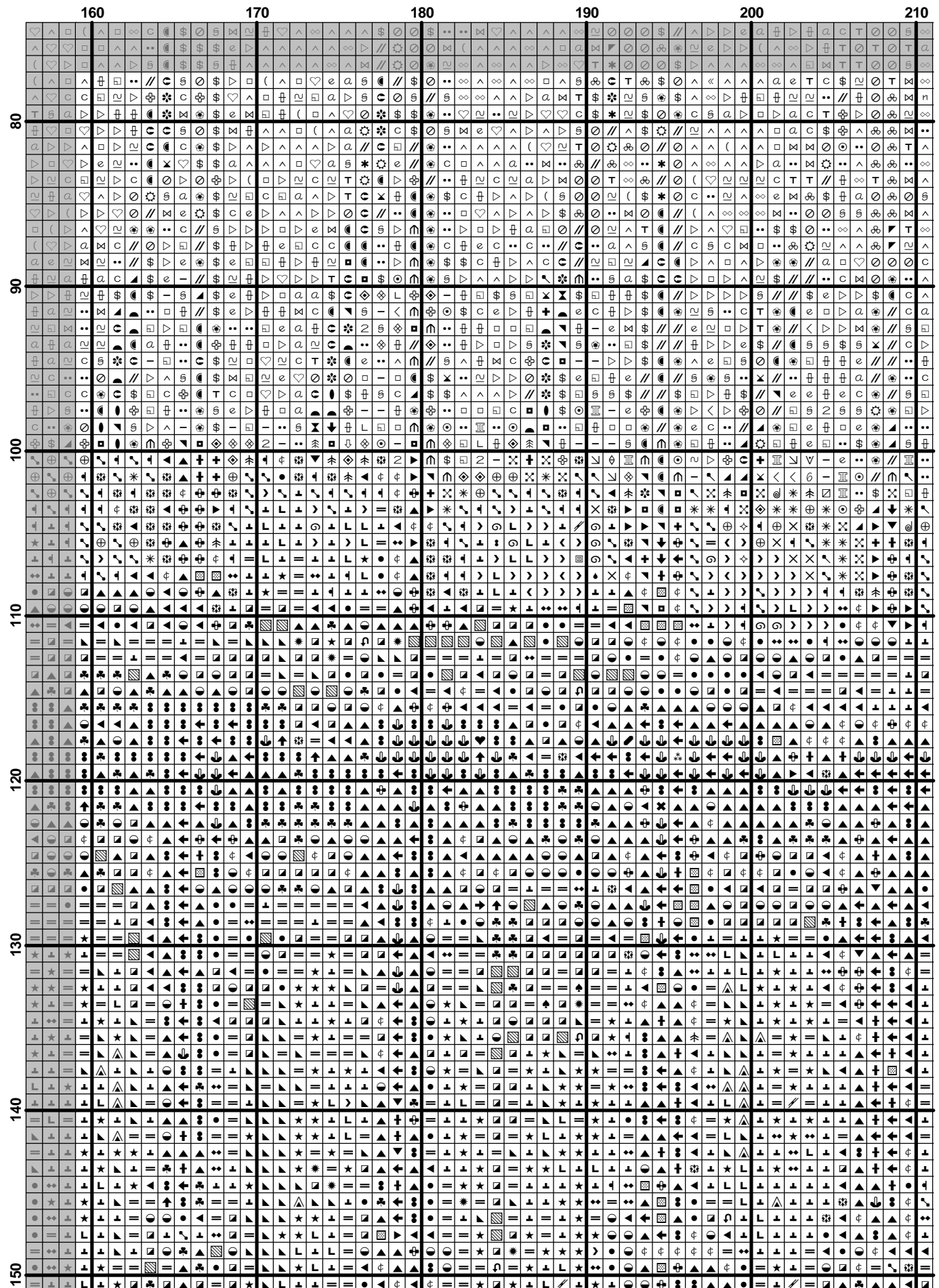
$$(19) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

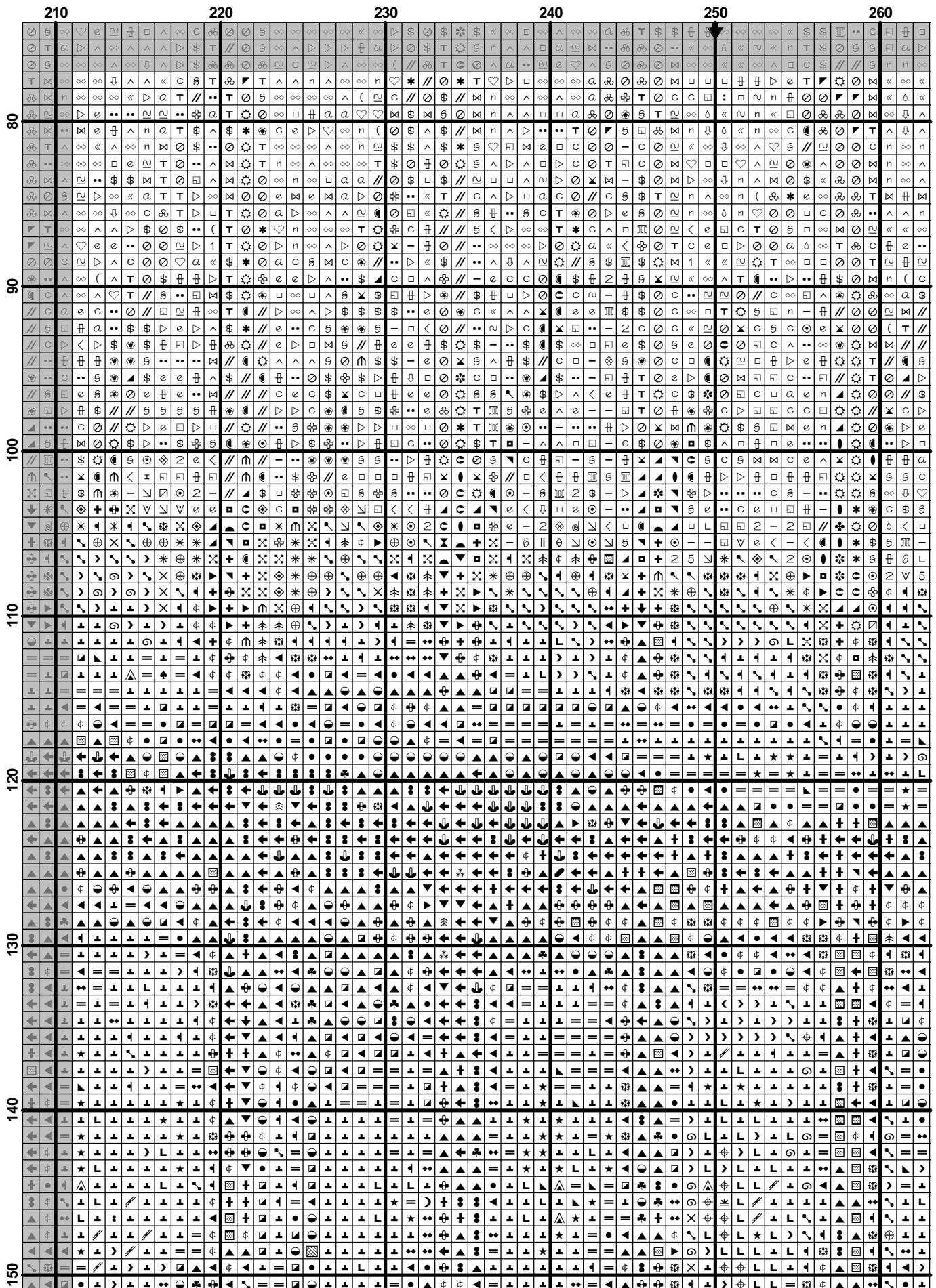
(20)



$$(22) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (23)$$

	110										120										130										140										150									
80																																																		
90																																																		
100																																																		
110																																																		
120																																																		
130																																																		
140																																																		
150																																																		

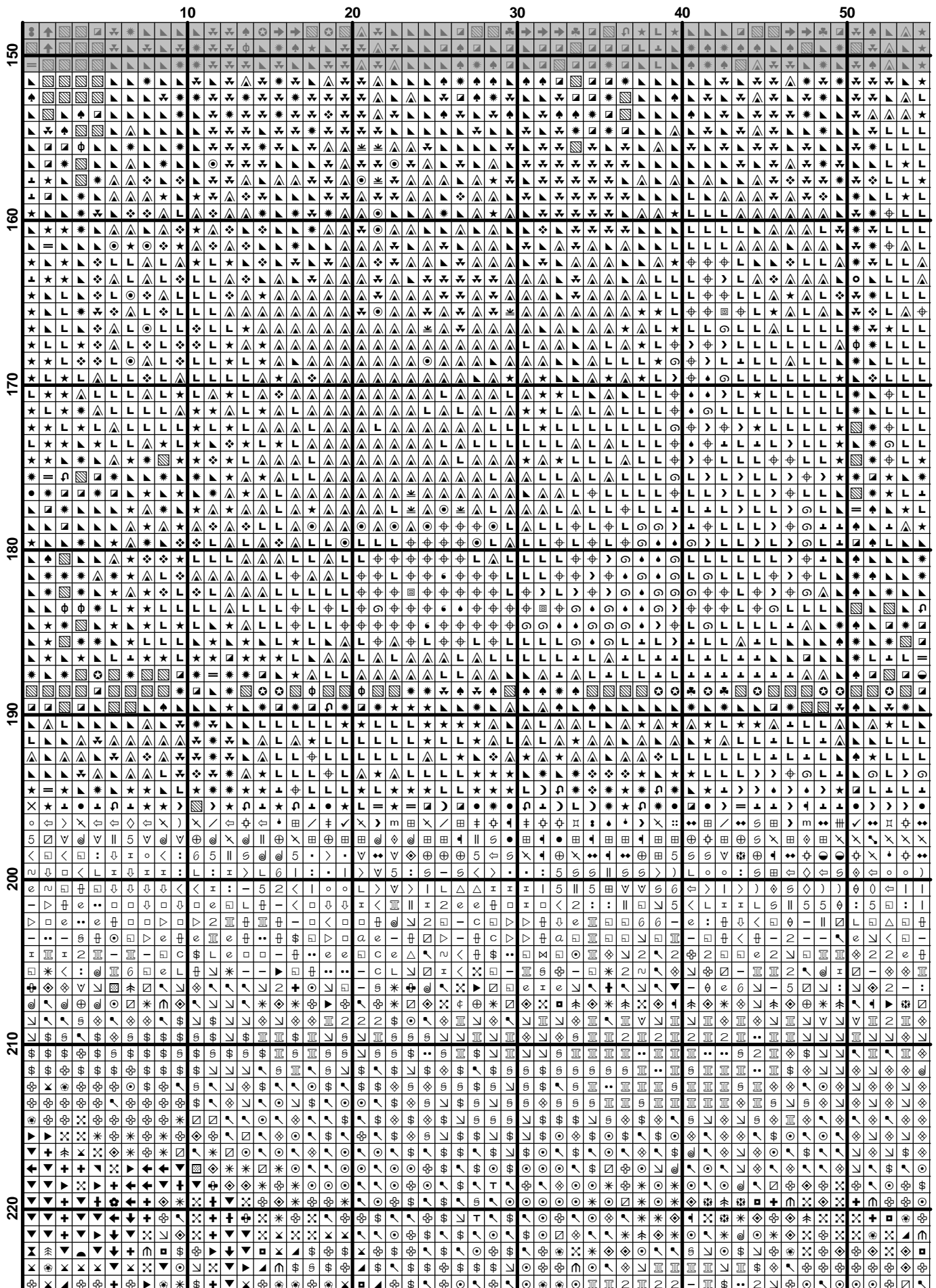




$$(27) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (28)$$

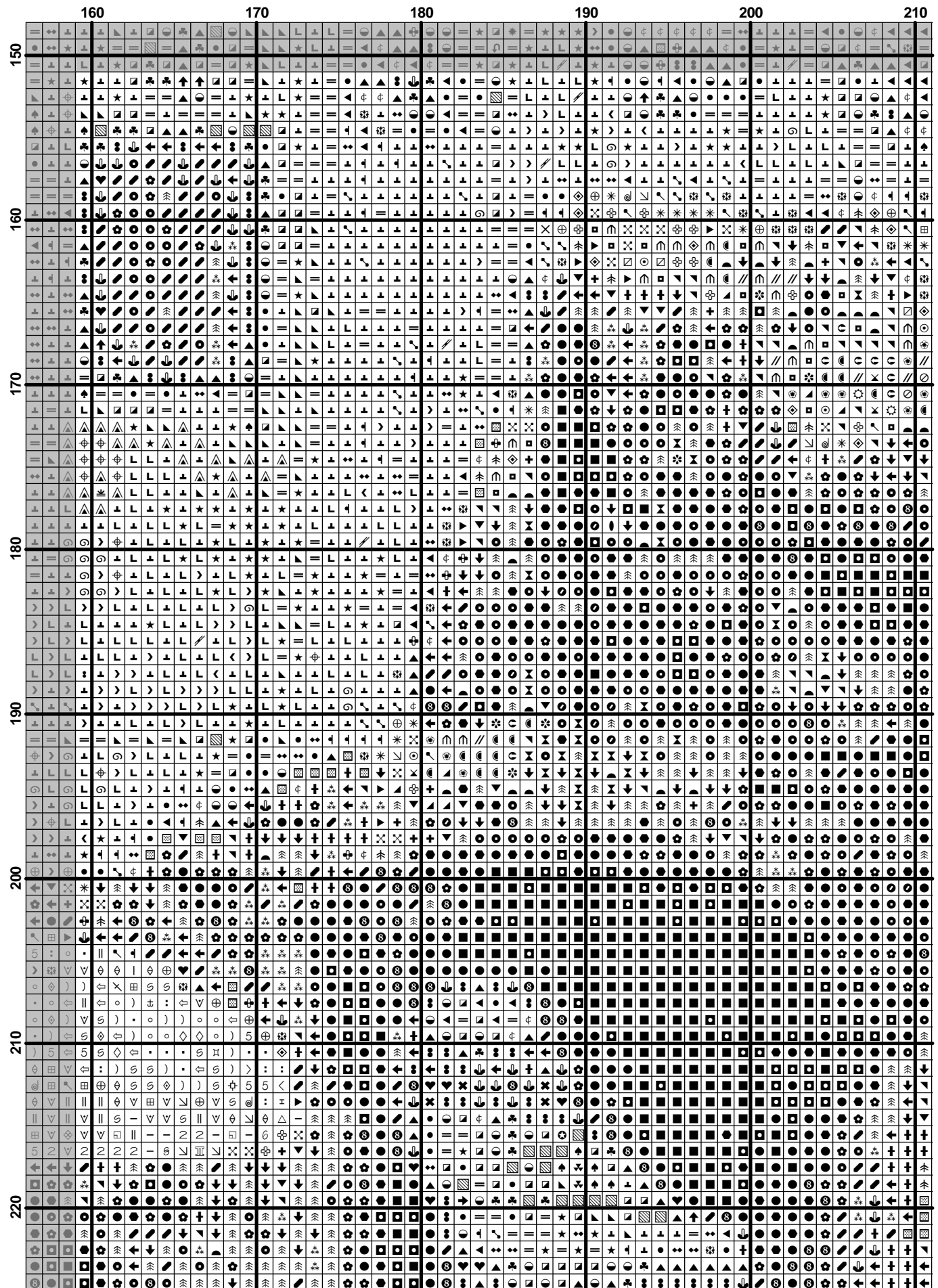
[illegible]

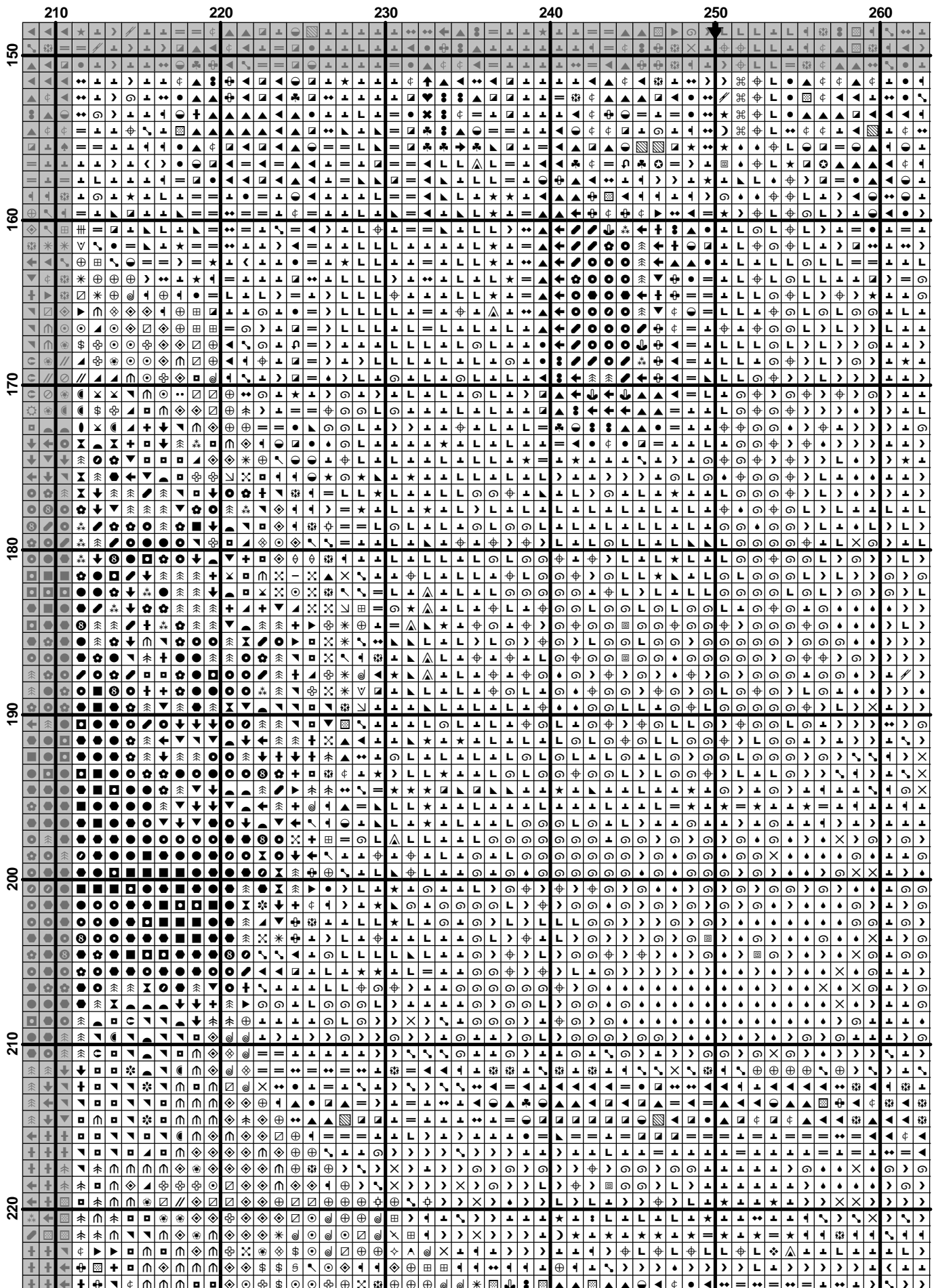
[illegible]



$$(32) \quad \mathcal{H}^{\text{reg}}_{\text{reg}} = \mathcal{H}^{\text{reg}}_{\text{reg}} \quad (33)$$

	110	120	130	140	150
150					
160					
170					
180					
190					
200					
210					
220					





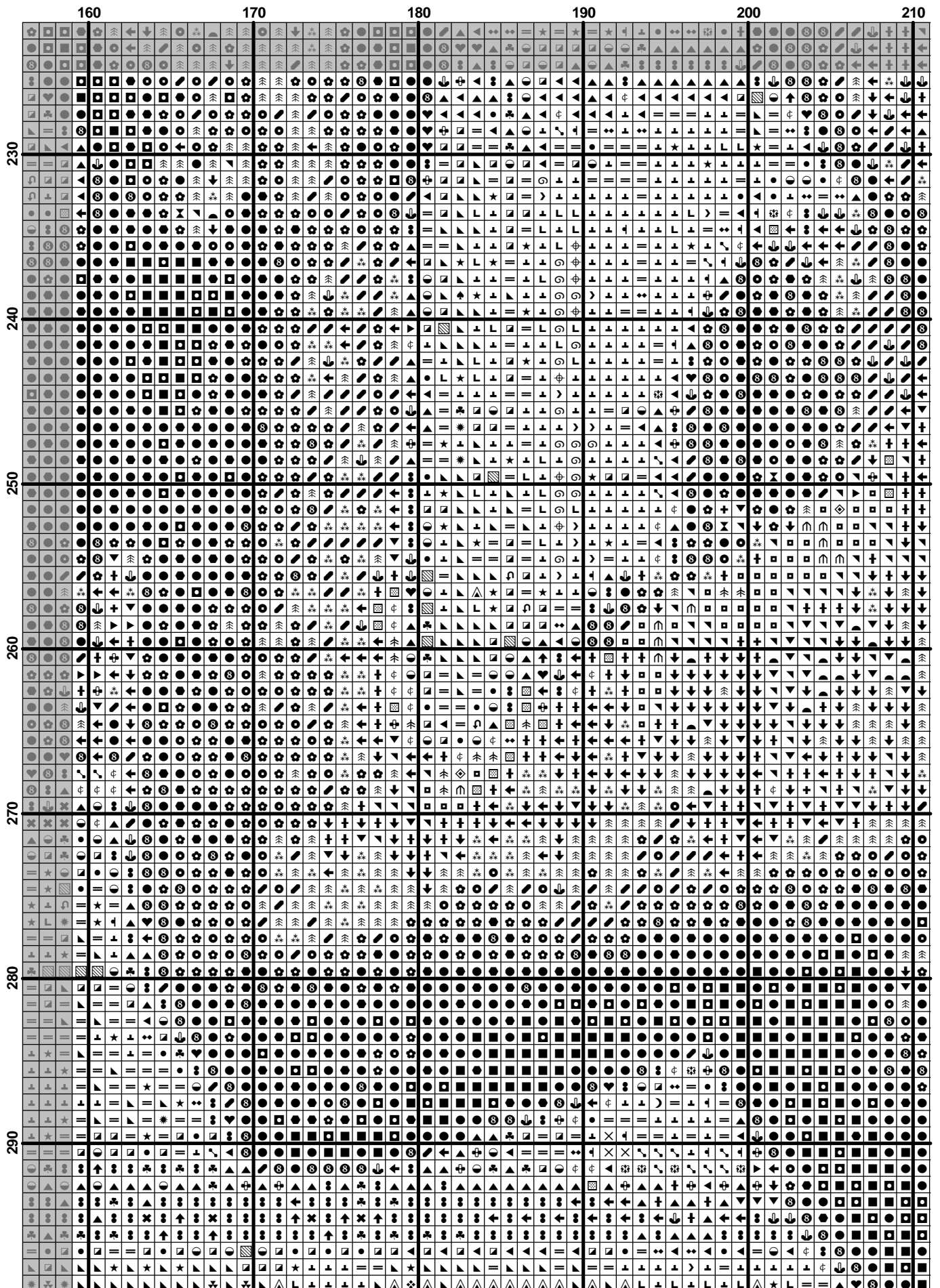
[illegible]

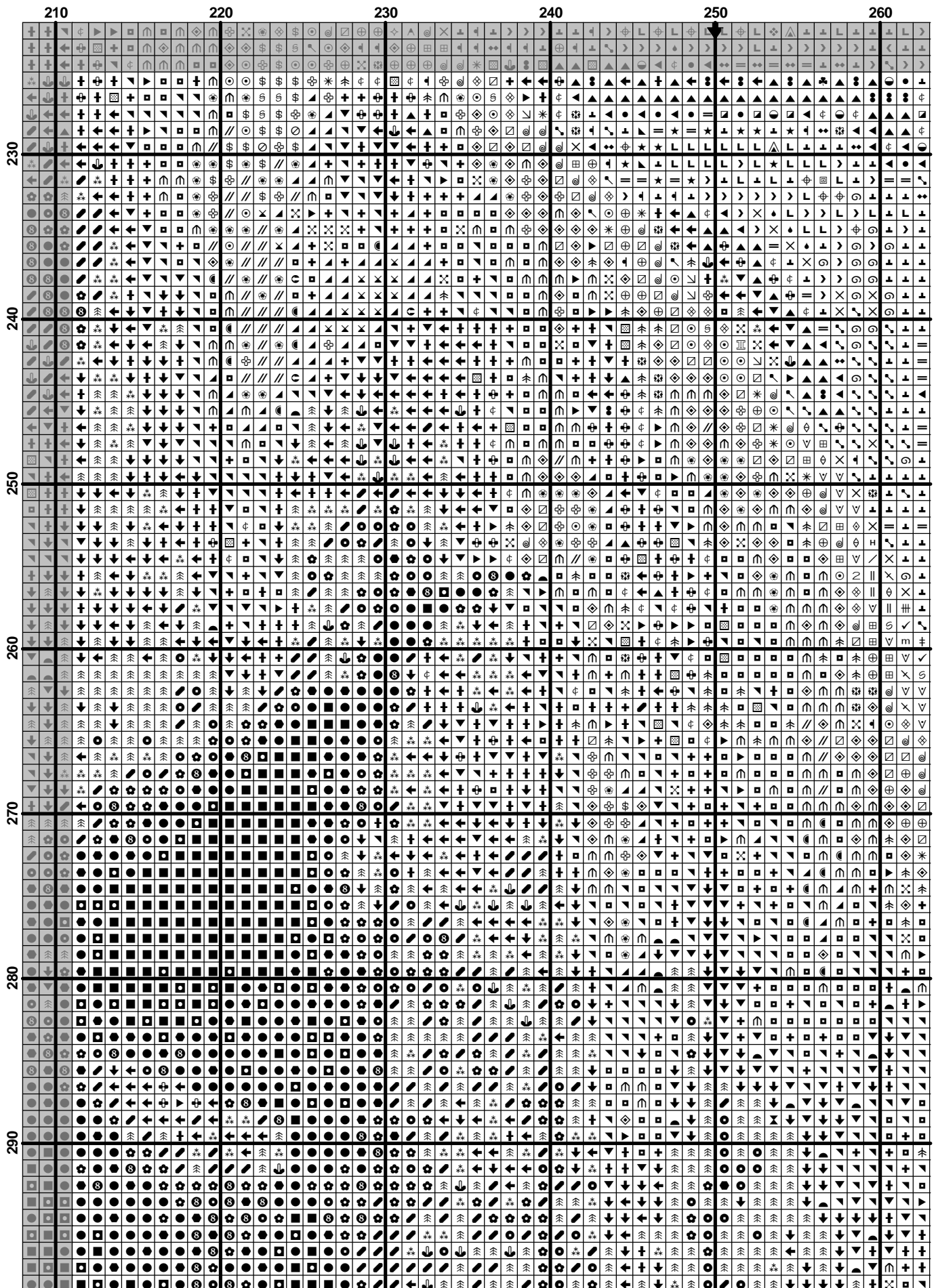
[illegible]

(40)

[illegible]

	110	120	130	140	150
230					
240					
250					
260					
270					
280					
290					





[illegible]

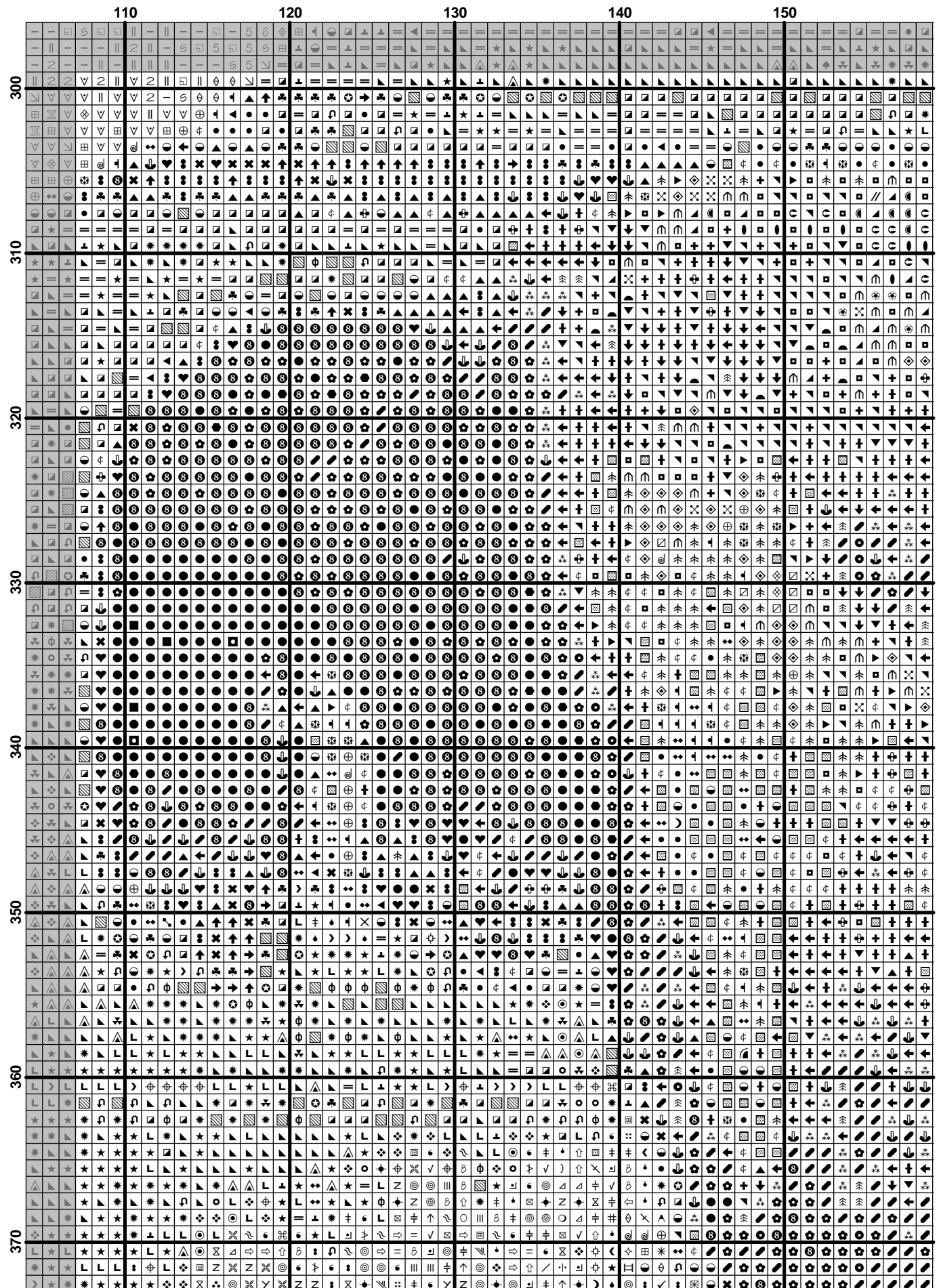
[illegible]

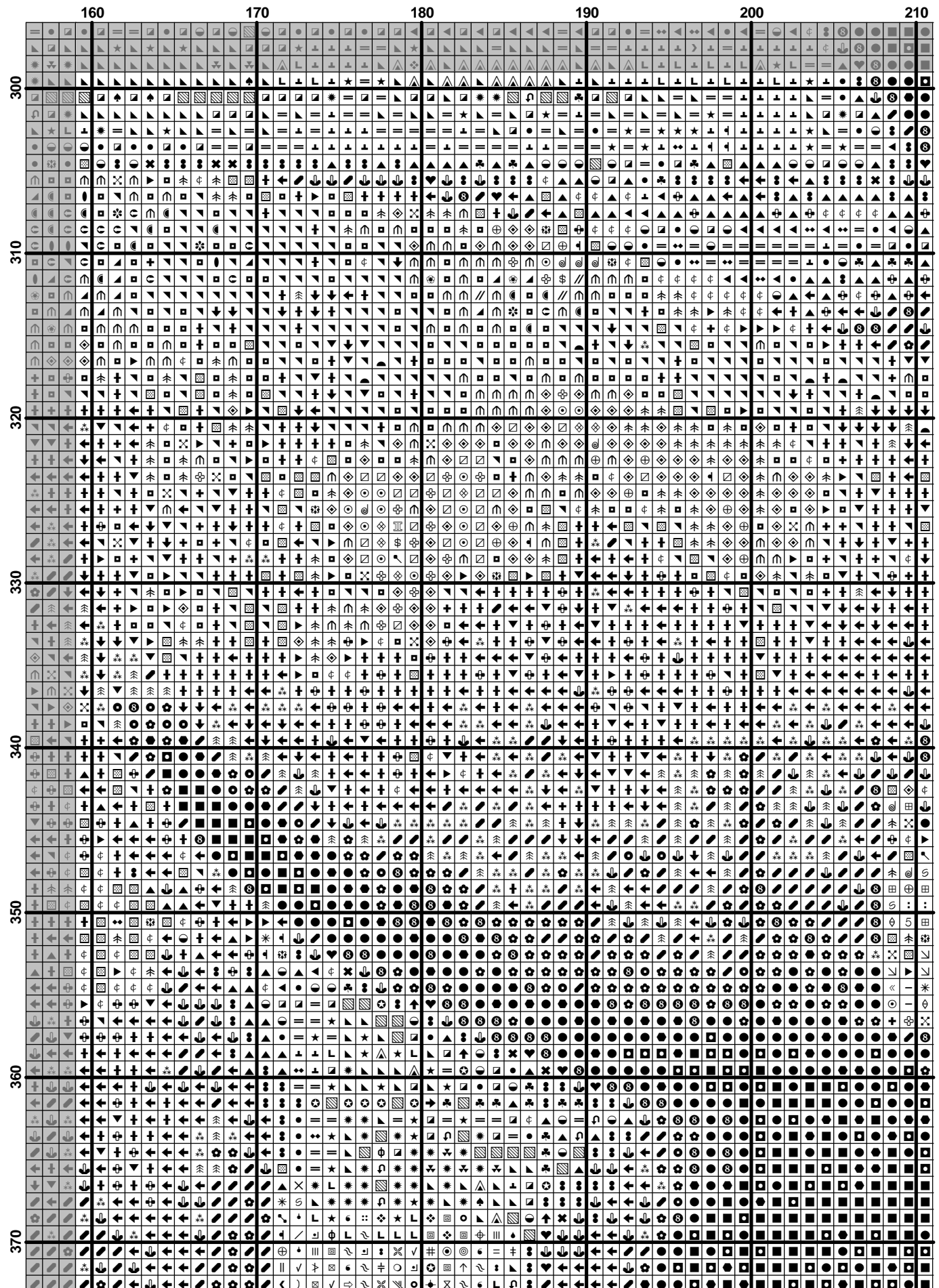
[illegible]

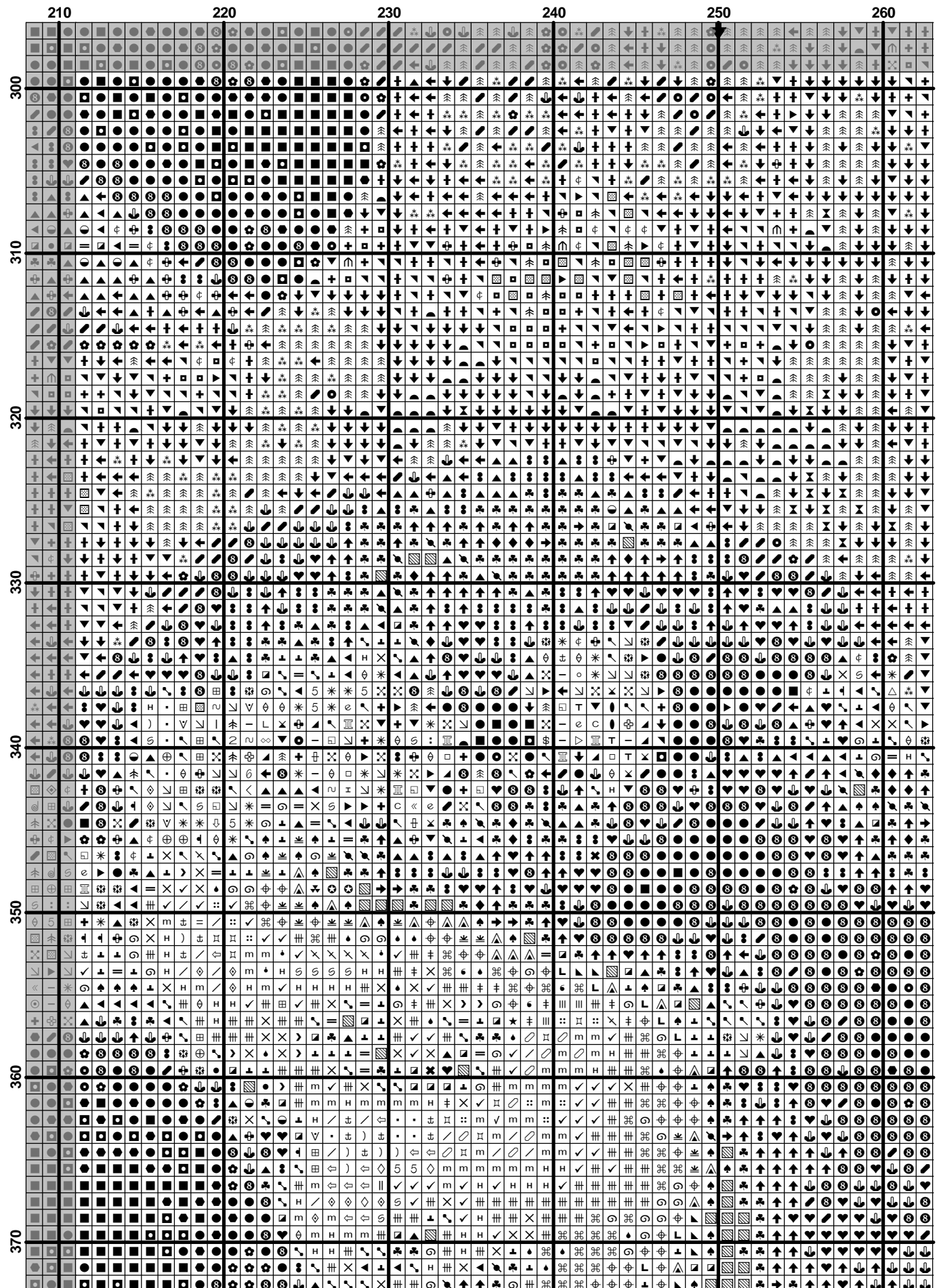
(50)

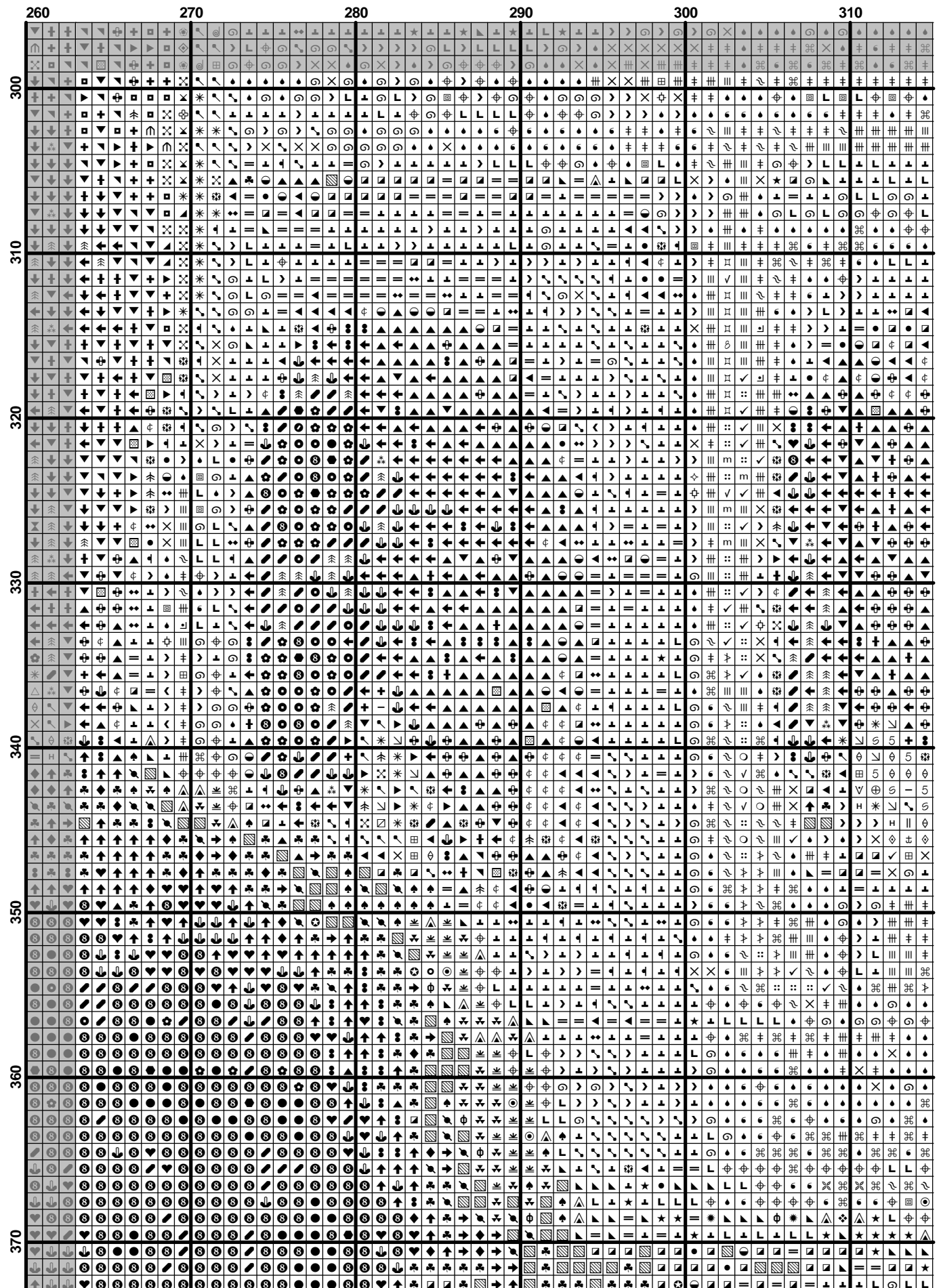
	10										20										30										40										50									
300																																																		
310																																																		
320																																																		
330																																																		
340																																																		
350																																																		
360																																																		
370																																																		

	60															70															80															90															100														
300																																																																											
310																																																																											
320																																																																											
330																																																																											
340																																																																											
350																																																																											
360																																																																											
370																																																																											







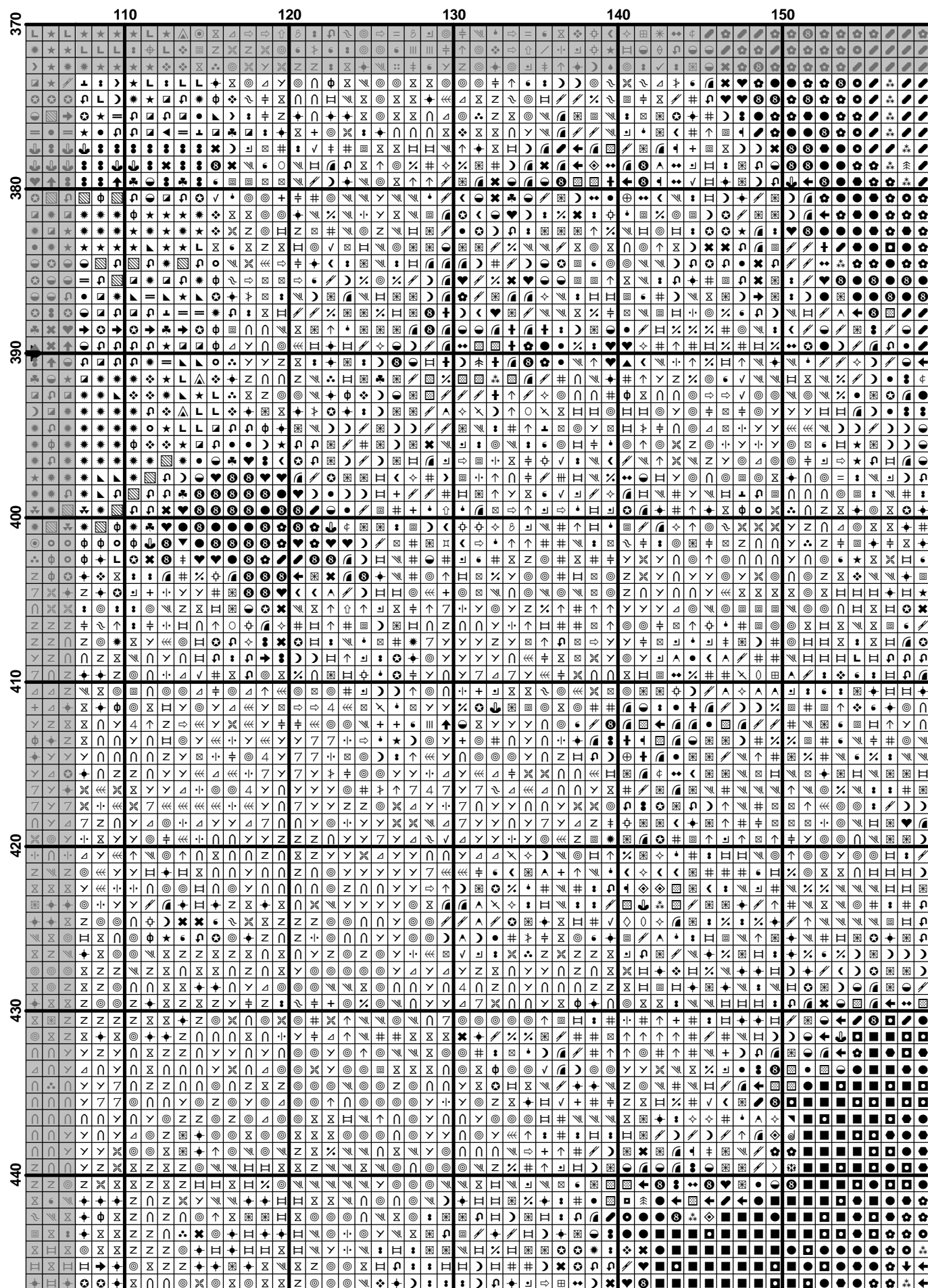


[illegible]

(60)

$$(61) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

	60	70	80	90	100
370					
380					
390					
400					
410					
420					
430					
440					



370	160	170	180	190	200	210
380						
390						
400						
410						
420						
430						
440						

	210	220	230	240	250	260
370
380
390
400
410
420
430
440

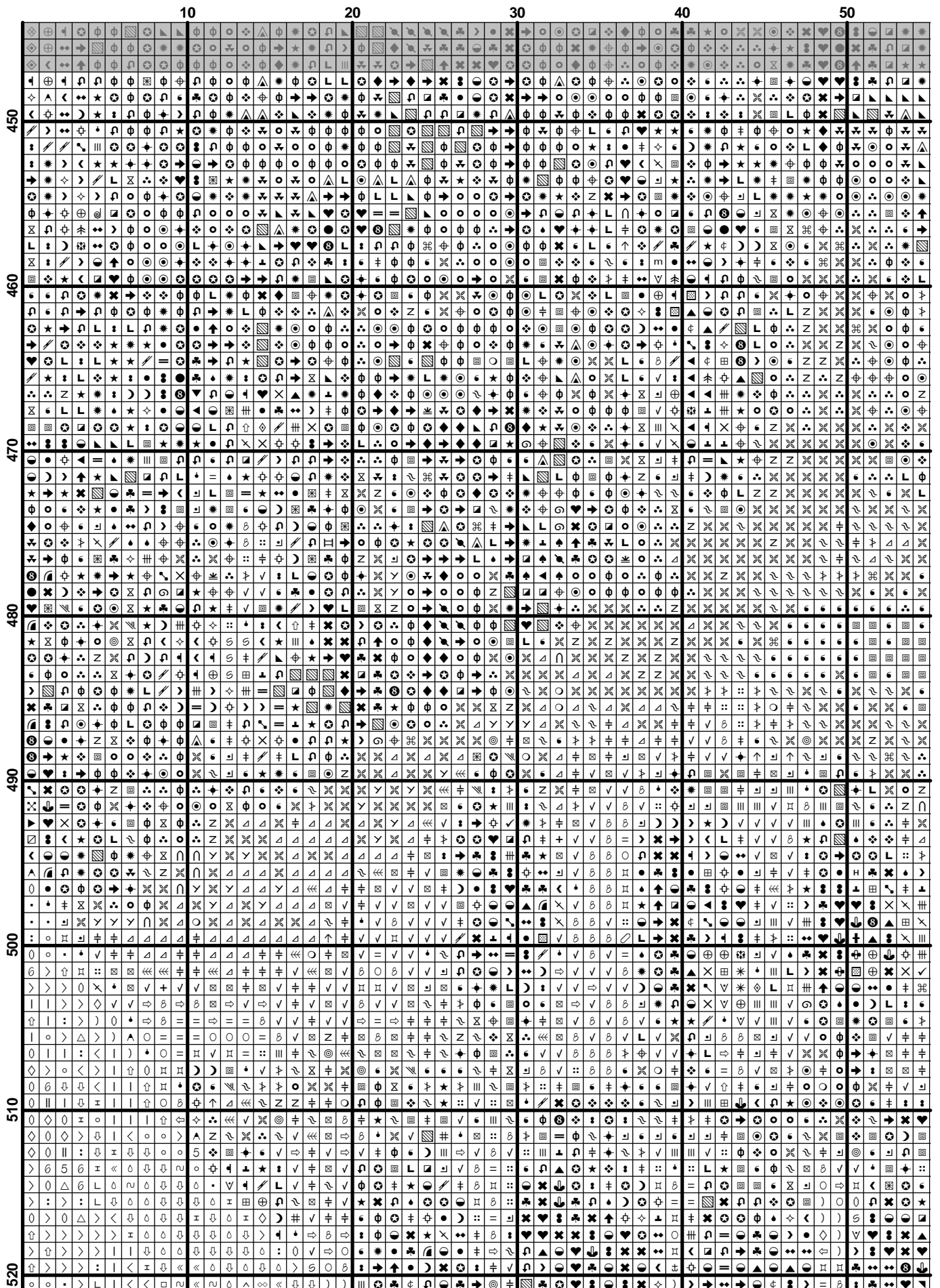
	270	280	290	300	310
370					
380					
390					
400					
410					
420					
430					
440					

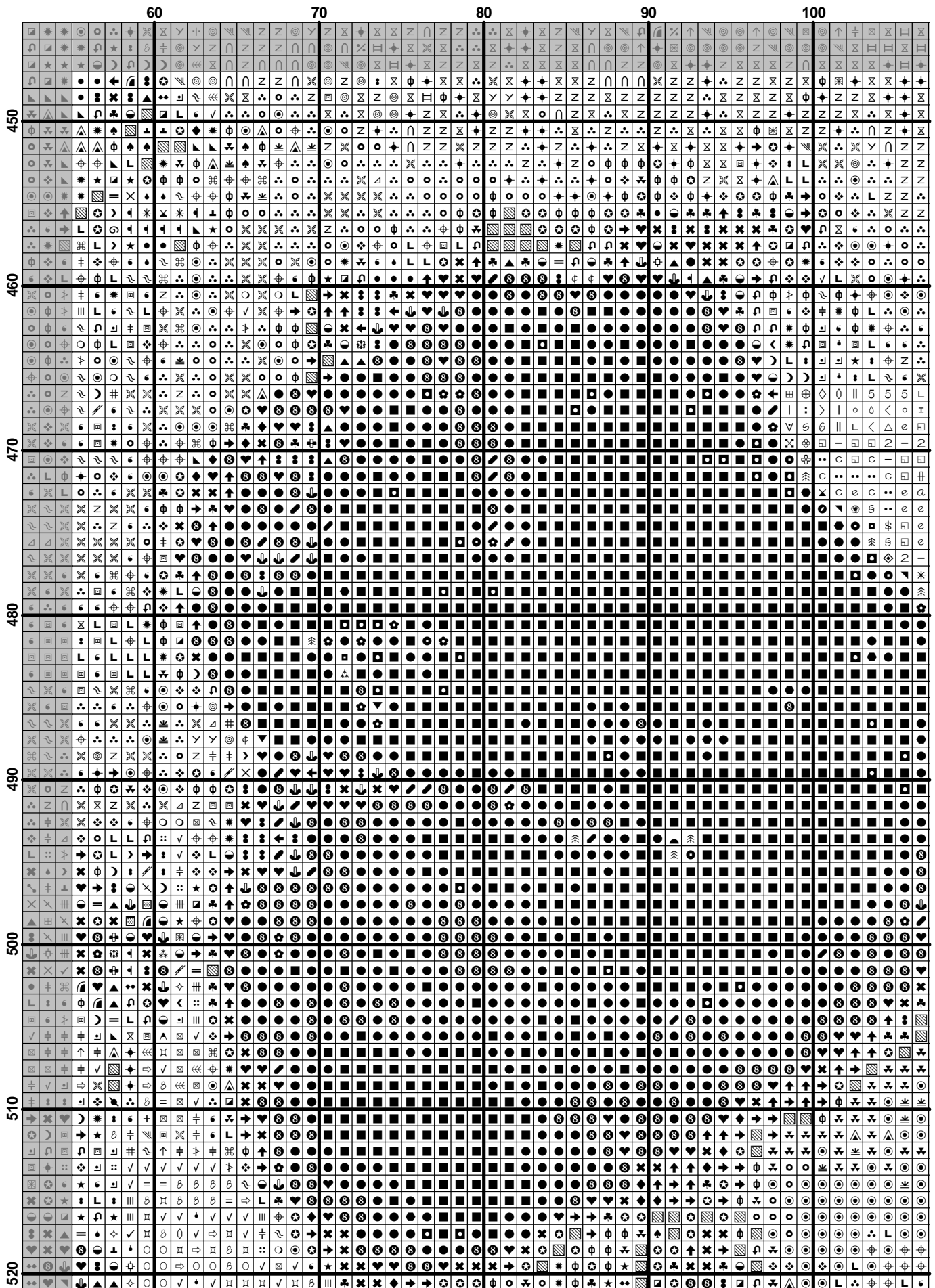
(68)

	370	380	390	400	410
370	+	4	+	4	+
380	+	4	+	4	+
390	+	4	+	4	+
400	+	4	+	4	+
410	+	4	+	4	+
420	+	4	+	4	+
430	+	4	+	4	+
440	+	4	+	4	+
450	+	4	+	4	+
460	+	4	+	4	+
470	+	4	+	4	+
480	+	4	+	4	+
490	+	4	+	4	+
500	+	4	+	4	+
510	+	4	+	4	+
520	+	4	+	4	+
530	+	4	+	4	+
540	+	4	+	4	+
550	+	4	+	4	+
560	+	4	+	4	+
570	+	4	+	4	+
580	+	4	+	4	+
590	+	4	+	4	+
600	+	4	+	4	+
610	+	4	+	4	+
620	+	4	+	4	+
630	+	4	+	4	+
640	+	4	+	4	+
650	+	4	+	4	+
660	+	4	+	4	+
670	+	4	+	4	+
680	+	4	+	4	+
690	+	4	+	4	+
700	+	4	+	4	+
710	+	4	+	4	+
720	+	4	+	4	+
730	+	4	+	4	+
740	+	4	+	4	+
750	+	4	+	4	+
760	+	4	+	4	+
770	+	4	+	4	+
780	+	4	+	4	+
790	+	4	+	4	+
800	+	4	+	4	+
810	+	4	+	4	+
820	+	4	+	4	+
830	+	4	+	4	+
840	+	4	+	4	+
850	+	4	+	4	+
860	+	4	+	4	+
870	+	4	+	4	+
880	+	4	+	4	+
890	+	4	+	4	+
900	+	4	+	4	+
910	+	4	+	4	+
920	+	4	+	4	+
930	+	4	+	4	+
940	+	4	+	4	+
950	+	4	+	4	+
960	+	4	+	4	+
970	+	4	+	4	+
980	+	4	+	4	+
990	+	4	+	4	+
1000	+	4	+	4	+

	420	430	440	450	460	470
370	⬆	⬆	⬆	⬆	⬆	⬆
380	⬆	⬆	⬆	⬆	⬆	⬆
390	⬆	⬆	⬆	⬆	⬆	⬆
400	⬆	⬆	⬆	⬆	⬆	⬆
410	⬆	⬆	⬆	⬆	⬆	⬆
420	⬆	⬆	⬆	⬆	⬆	⬆
430	⬆	⬆	⬆	⬆	⬆	⬆
440	⬆	⬆	⬆	⬆	⬆	⬆

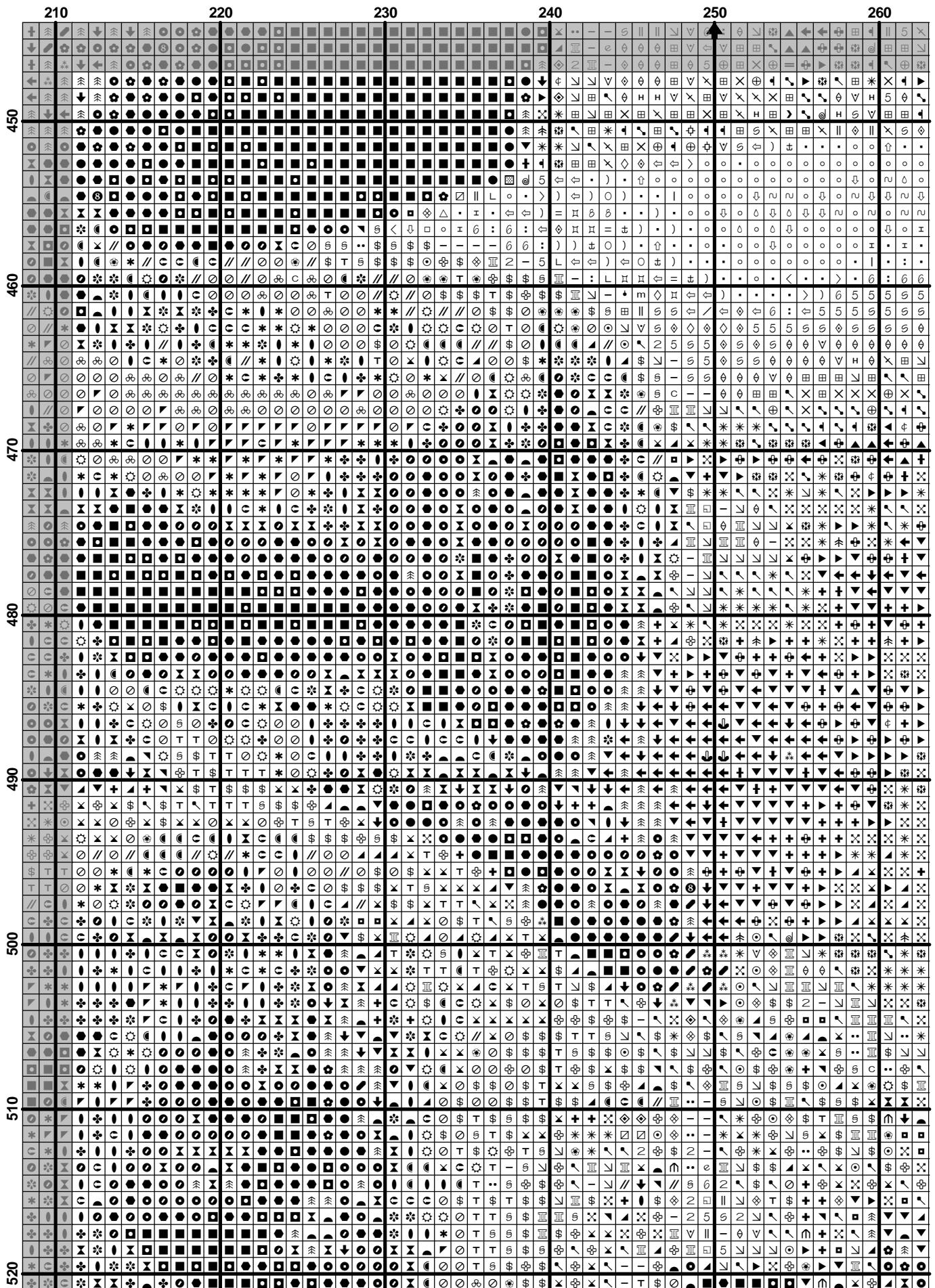
(70)





	110	120	130	140	150
450					
460					
470					
480					
490					
500					
510					
520					

[illegible]



$$(76) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \int_0^t K_\alpha(t,s) f(s) ds$$

	320																330																340																350																360																															
450																																																																																																
460																																																																																																
470																																																																																																
480																																																																																																
490																																																																																																
500																																																																																																
510																																																																																																
520																																																																																																

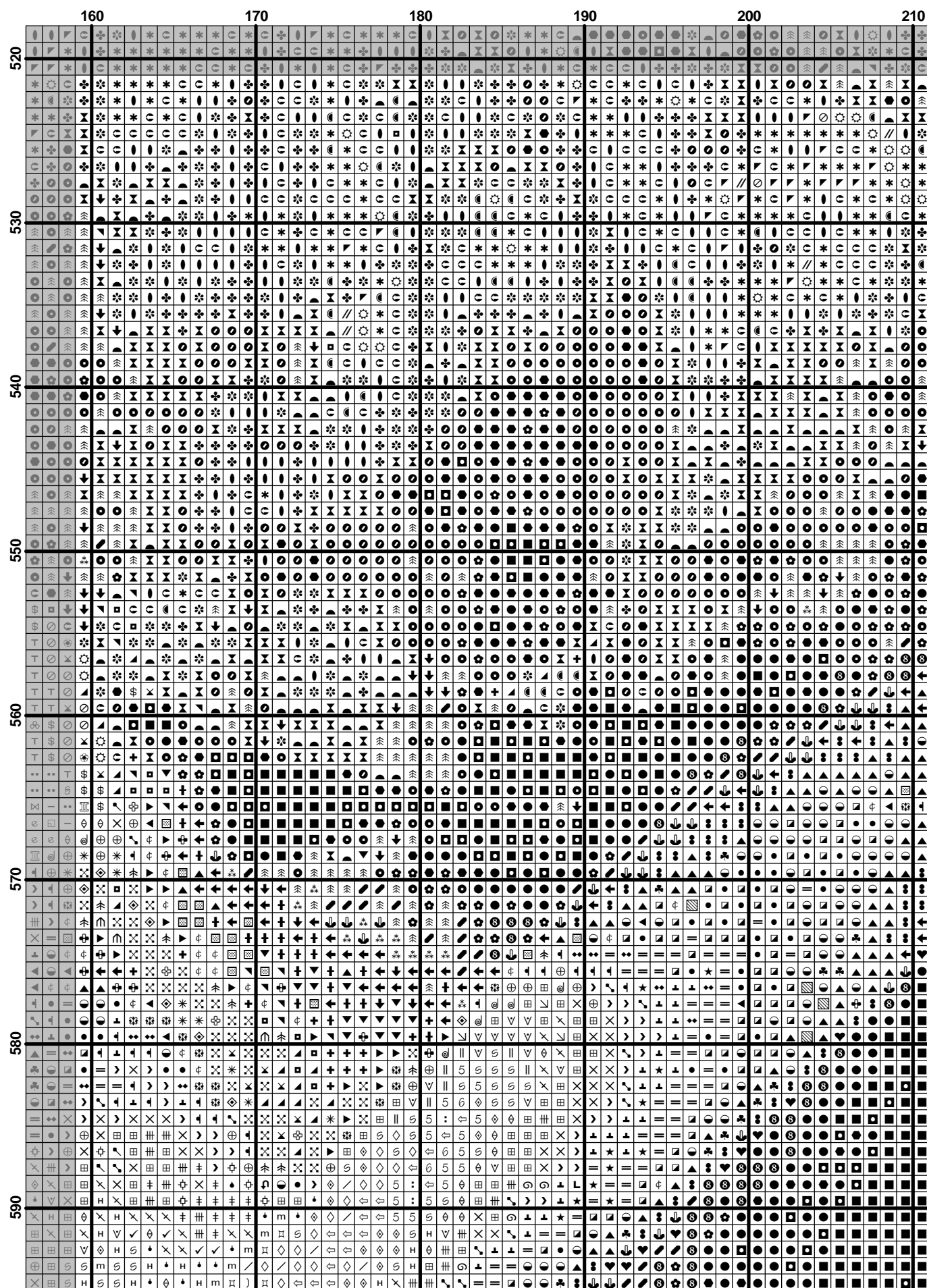
$$(78) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds + \frac{1}{\Gamma(\alpha)} \int_t^\infty (t-s)^{\alpha-1} f(s) ds$$

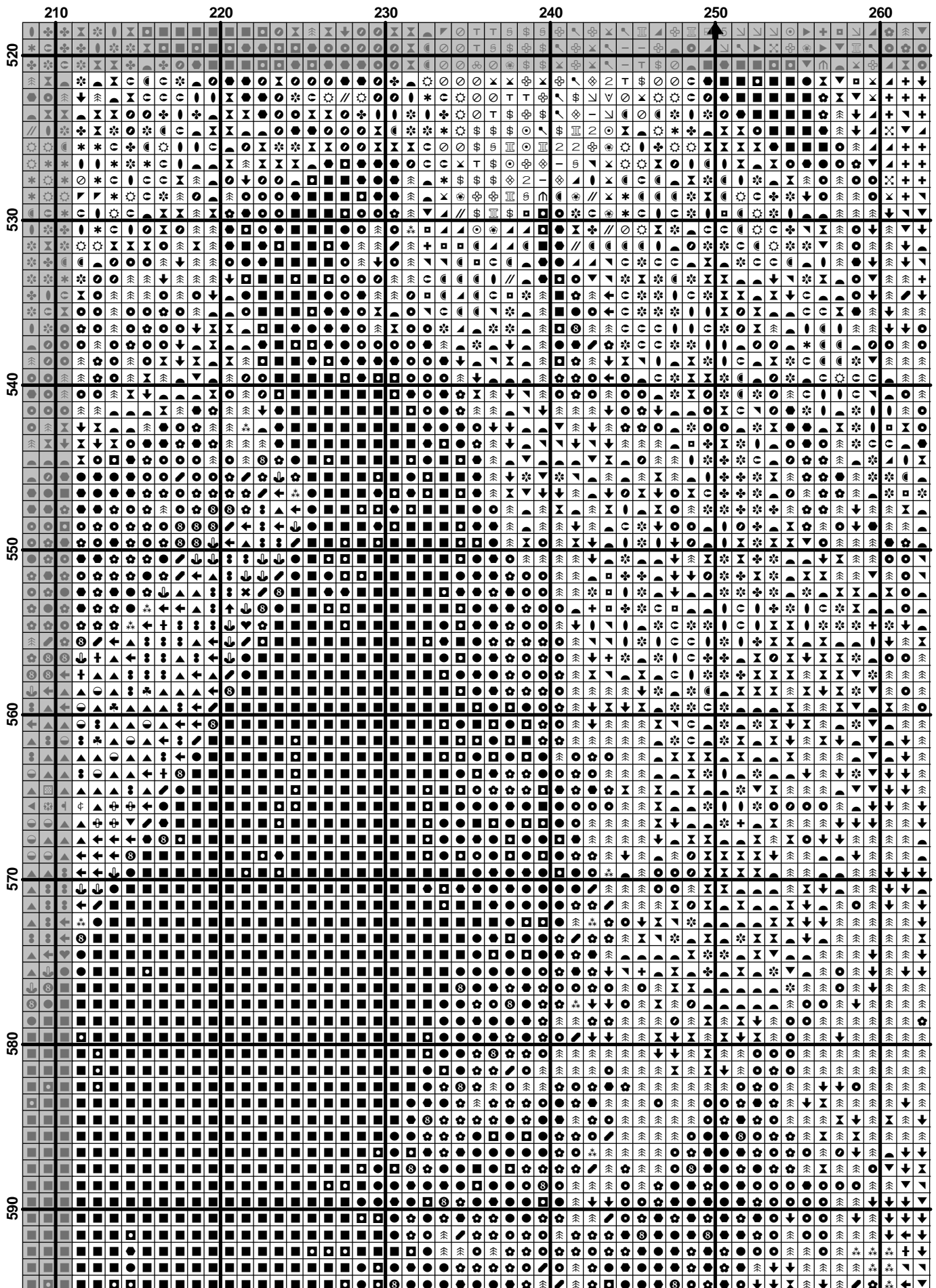
	420	430	440	450	460	470
450	450	450	450	450	450	450
460	460	460	460	460	460	460
470	470	470	470	470	470	470
480	480	480	480	480	480	480
490	490	490	490	490	490	490
500	500	500	500	500	500	500
510	510	510	510	510	510	510
520	520	520	520	520	520	520

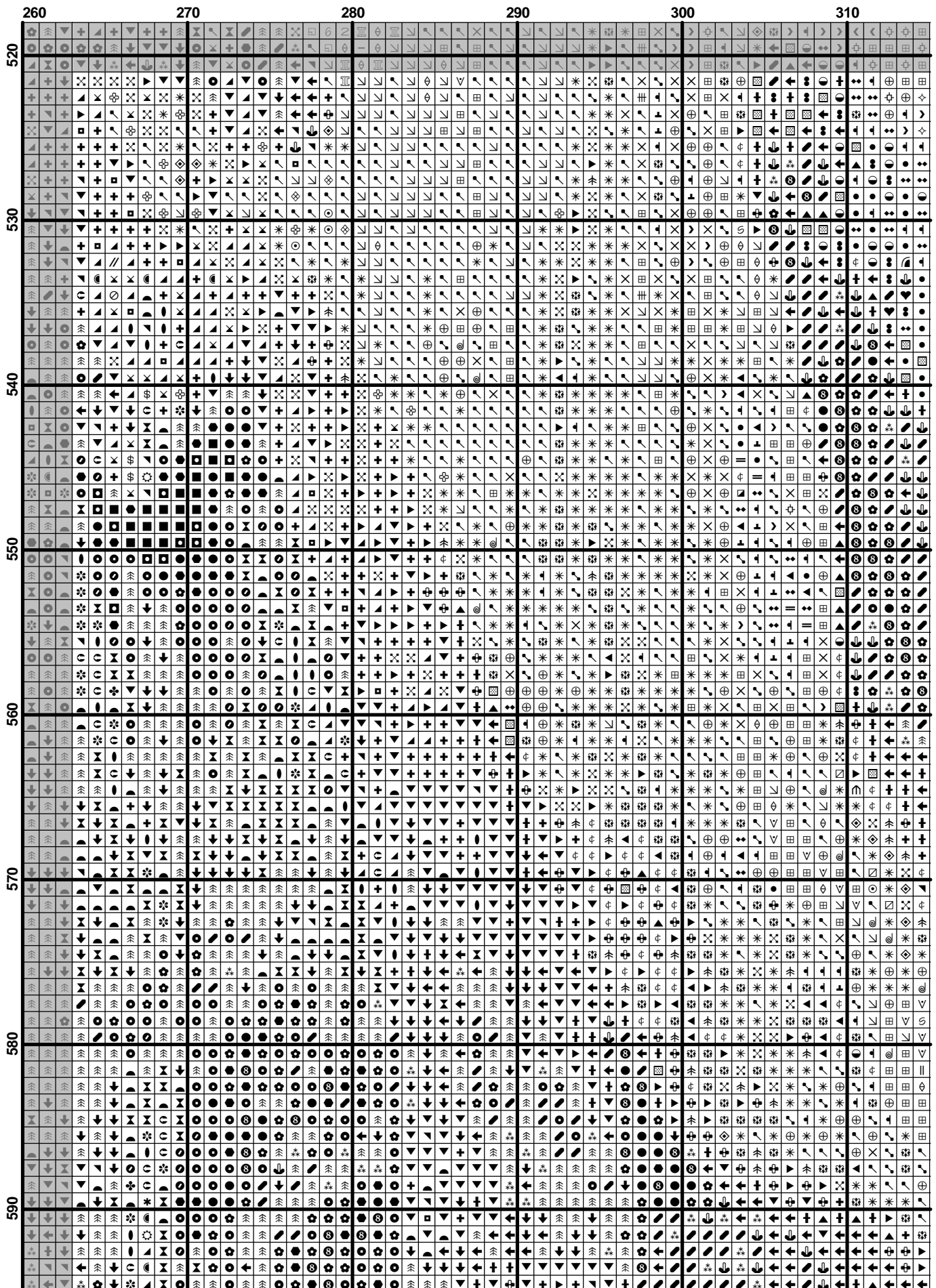
[illegible]

$$(82) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (83)$$

[illegible]







	320	330	340	350	360
520
530
540
550
560
570
580
590

[illegible]

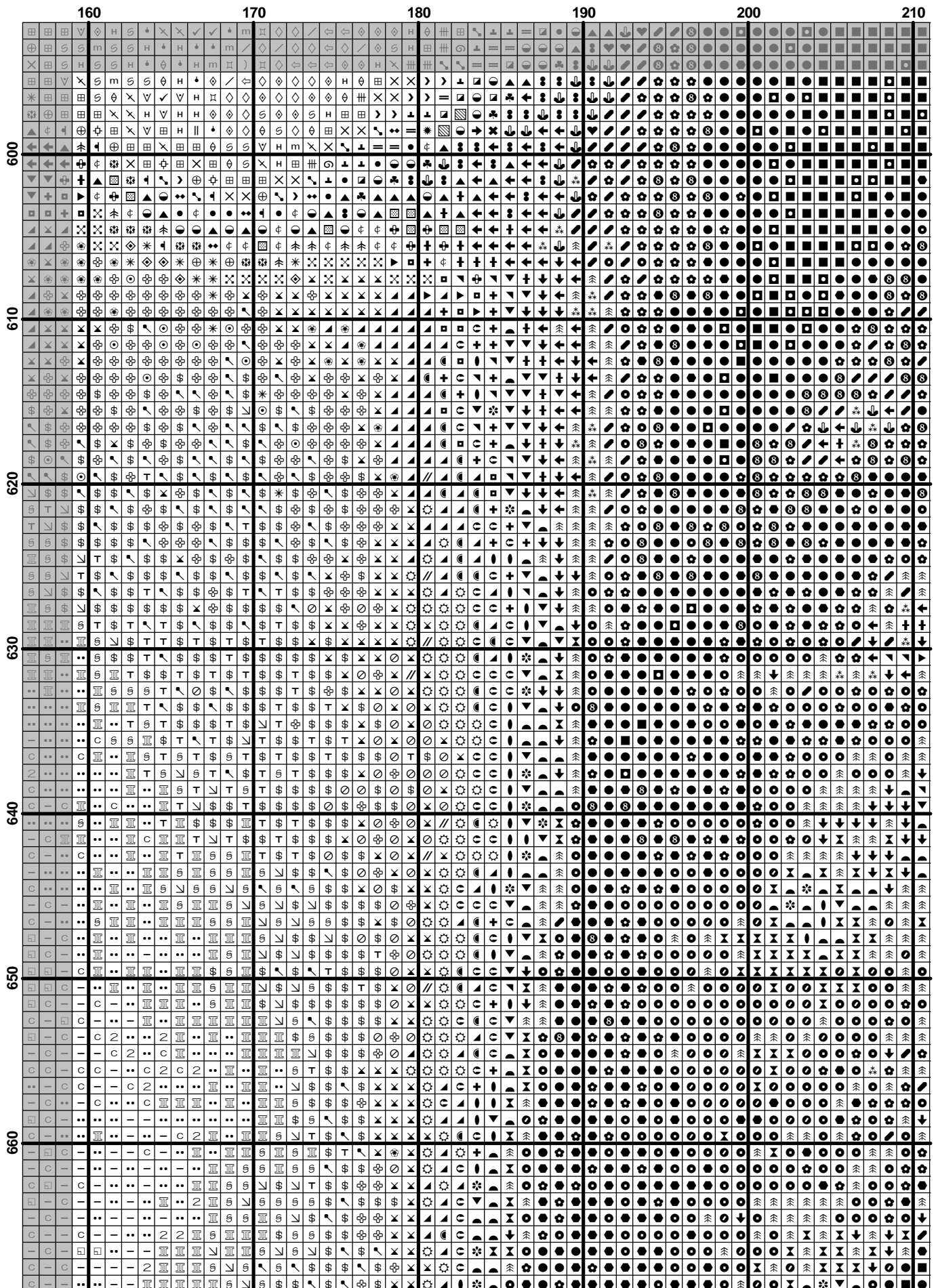
[illegible]

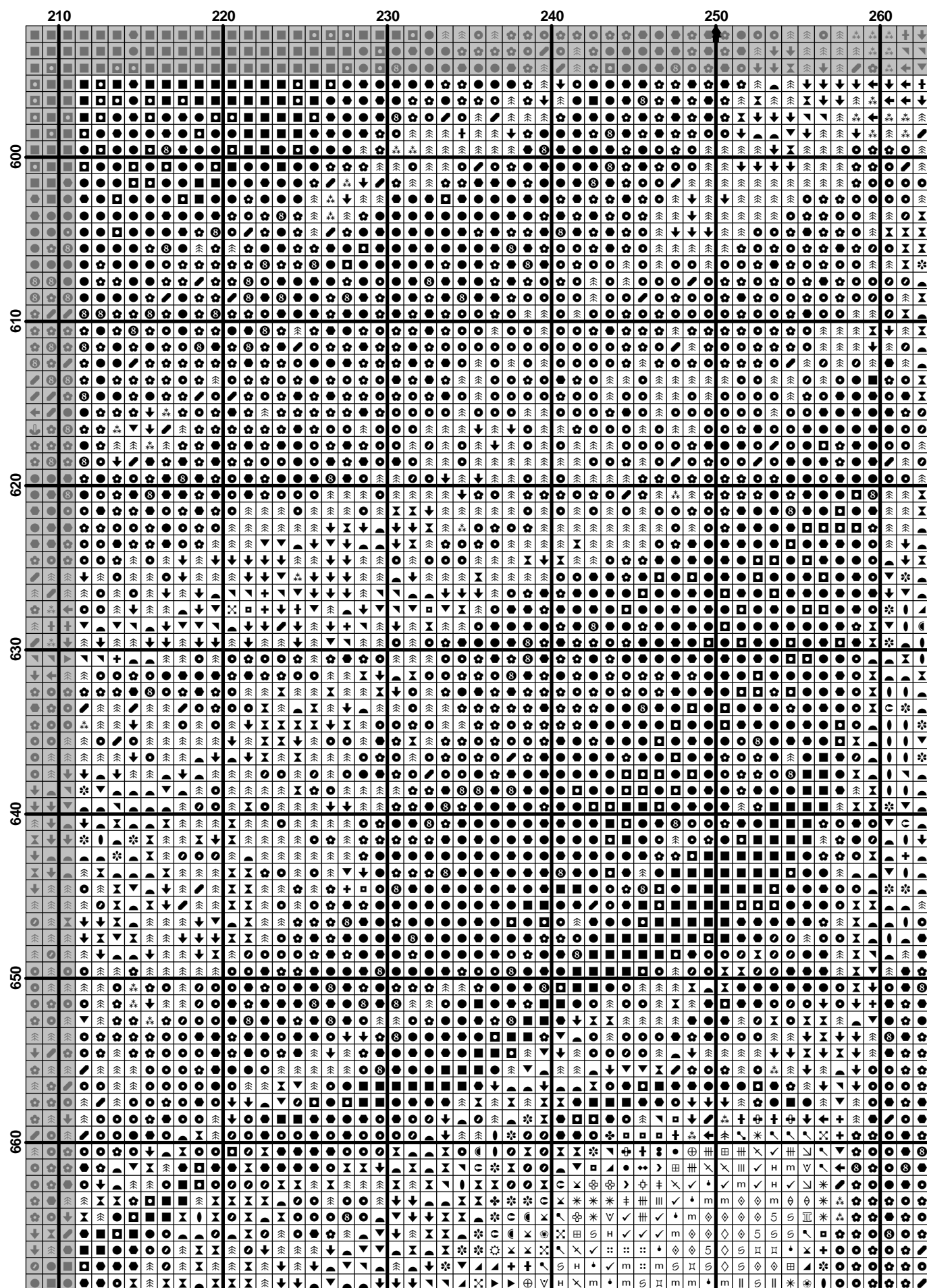
(90)

	10										20										30										40										50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
600	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+</

$$(92) \quad \text{---} \quad (93)$$

[illegible]





$$(96) \quad \text{[The following is a special case of (95) with } \mathbf{A} = \mathbf{I} \text{ and } \mathbf{B} = \mathbf{0} \text{, where } \mathbf{I} \text{ is the identity matrix.}] \quad (97)$$

	320	330	340	350	360
600	⬆	⬆	⬆	⬆	⬆
601	⬆	⬆	⬆	⬆	⬆
602	⬆	⬆	⬆	⬆	⬆
603	⬆	⬆	⬆	⬆	⬆
604	⬆	⬆	⬆	⬆	⬆
605	⬆	⬆	⬆	⬆	⬆
606	⬆	⬆	⬆	⬆	⬆
607	⬆	⬆	⬆	⬆	⬆
608	⬆	⬆	⬆	⬆	⬆
609	⬆	⬆	⬆	⬆	⬆
610	⬆	⬆	⬆	⬆	⬆
611	⬆	⬆	⬆	⬆	⬆
612	⬆	⬆	⬆	⬆	⬆
613	⬆	⬆	⬆	⬆	⬆
614	⬆	⬆	⬆	⬆	⬆
615	⬆	⬆	⬆	⬆	⬆
616	⬆	⬆	⬆	⬆	⬆
617	⬆	⬆	⬆	⬆	⬆
618	⬆	⬆	⬆	⬆	⬆
619	⬆	⬆	⬆	⬆	⬆
620	⬆	⬆	⬆	⬆	⬆
621	⬆	⬆	⬆	⬆	⬆
622	⬆	⬆	⬆	⬆	⬆
623	⬆	⬆	⬆	⬆	⬆
624	⬆	⬆	⬆	⬆	⬆
625	⬆	⬆	⬆	⬆	⬆
626	⬆	⬆	⬆	⬆	⬆
627	⬆	⬆	⬆	⬆	⬆
628	⬆	⬆	⬆	⬆	⬆
629	⬆	⬆	⬆	⬆	⬆
630	⬆	⬆	⬆	⬆	⬆
631	⬆	⬆	⬆	⬆	⬆
632	⬆	⬆	⬆	⬆	⬆
633	⬆	⬆	⬆	⬆	⬆
634	⬆	⬆	⬆	⬆	⬆
635	⬆	⬆	⬆	⬆	⬆
636	⬆	⬆	⬆	⬆	⬆
637	⬆	⬆	⬆	⬆	⬆
638	⬆	⬆	⬆	⬆	⬆
639	⬆	⬆	⬆	⬆	⬆
640	⬆	⬆	⬆	⬆	⬆
641	⬆	⬆	⬆	⬆	⬆
642	⬆	⬆	⬆	⬆	⬆
643	⬆	⬆	⬆	⬆	⬆
644	⬆	⬆	⬆	⬆	⬆
645	⬆	⬆	⬆	⬆	⬆
646	⬆	⬆	⬆	⬆	⬆
647	⬆	⬆	⬆	⬆	⬆
648	⬆	⬆	⬆	⬆	⬆
649	⬆	⬆	⬆	⬆	⬆
650	⬆	⬆	⬆	⬆	⬆
651	⬆	⬆	⬆	⬆	⬆
652	⬆	⬆	⬆	⬆	⬆
653	⬆	⬆	⬆	⬆	⬆
654	⬆	⬆	⬆	⬆	⬆
655	⬆	⬆	⬆	⬆	⬆
656	⬆	⬆	⬆	⬆	⬆
657	⬆	⬆	⬆	⬆	⬆
658	⬆	⬆	⬆	⬆	⬆
659	⬆	⬆	⬆	⬆	⬆
660	⬆	⬆	⬆	⬆	⬆

[illegible]

$$(99) \quad \text{[The } \langle \text{N} \rangle \text{ is a } \langle \text{N} \rangle \text{]} \text{ is a } \langle \text{N} \rangle \text{.} \quad (100)$$

(100)

(102)

[illegible]

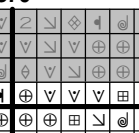
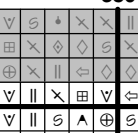
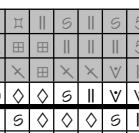
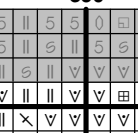
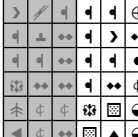
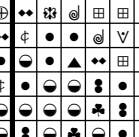
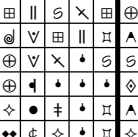
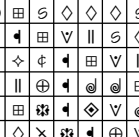
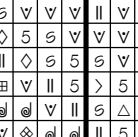
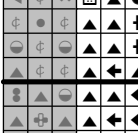
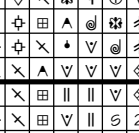

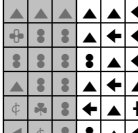
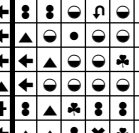
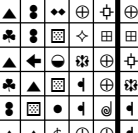
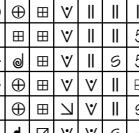
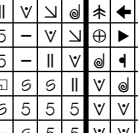
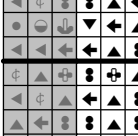
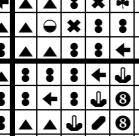
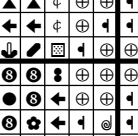
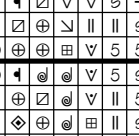

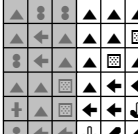
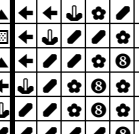

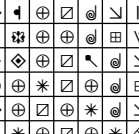
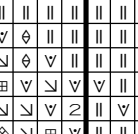
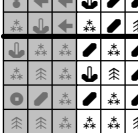
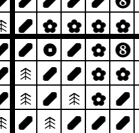

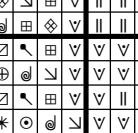
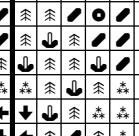
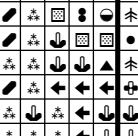
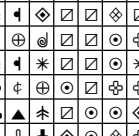
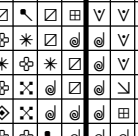
[illegible]

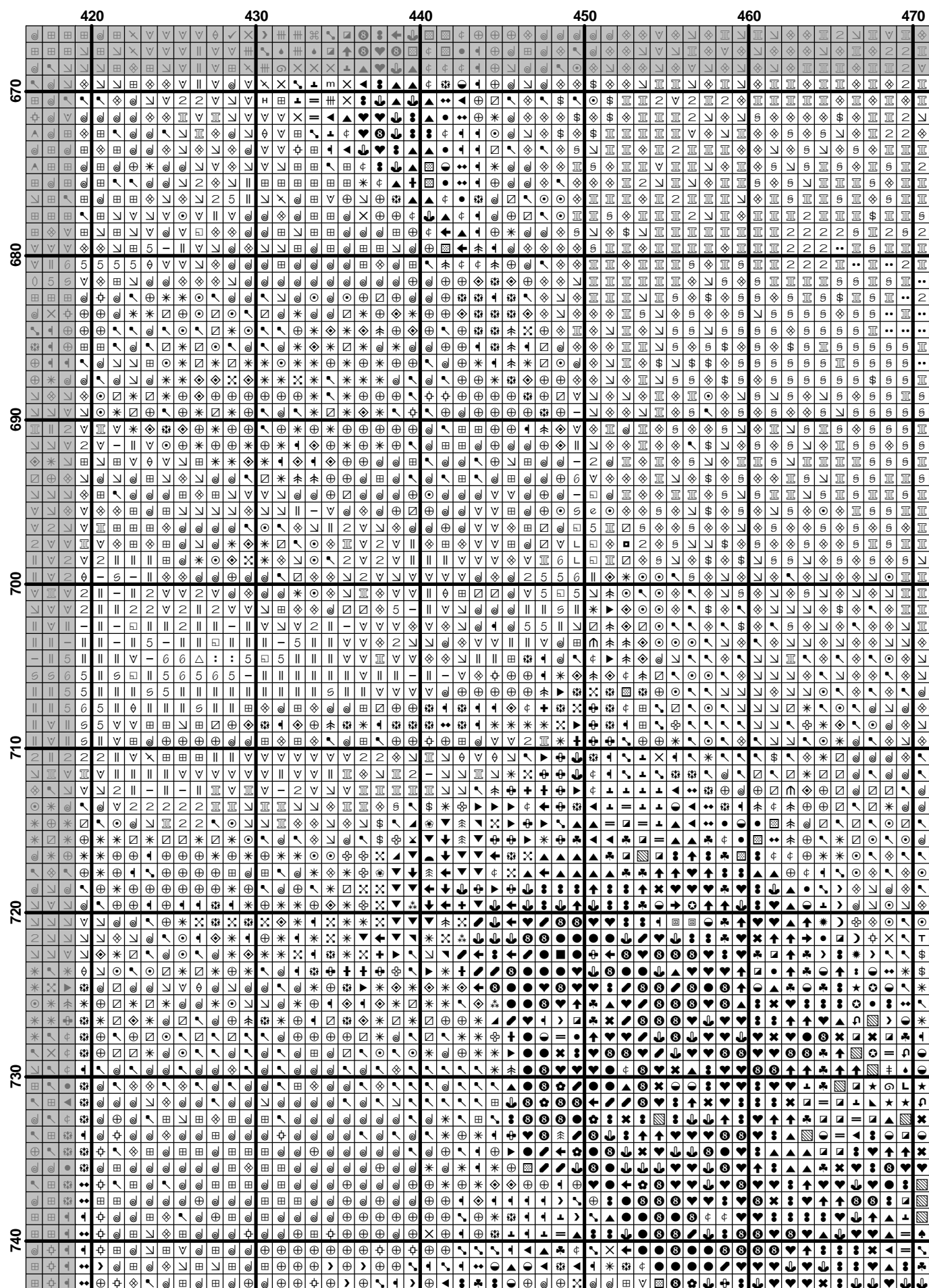
(105)

	210	220	230	240	250	260
670	↓	↓	↓	↓	↓	↓
680	↓	↓	↓	↓	↓	↓
690	↓	↓	↓	↓	↓	↓
700	↓	↓	↓	↓	↓	↓
710	↓	↓	↓	↓	↓	↓
720	↓	↓	↓	↓	↓	↓
730	↓	↓	↓	↓	↓	↓
740	↓	↓	↓	↓	↓	↓

	260	270	280	290	300	310
670
680
690
700
710
720
730
740

(108)

	370	380	390	400	410
670					
680					
690					
700					
710					
720					
730					
740					



(110)

[illegible]

[illegible]

[illegible]

	210										220										230										240										250										260																																																	
740																																																																																																				
750																																																																																																				
760																																																																																																				
770																																																																																																				
780																																																																																																				

740	260	270	280	290	300	310
750						
770						

	320	330	340	350	360
740					
750					
760					
770					
780					

	370	380	390	400	410
740					
750					
760					
770					
780					

	420										430										440										450										460										470																			
740																																																																						
750																																																																						
760																																																																						
770																																																																						
780																																																																						

	470																480																490																500															
740																																																																
750																																																																
760																																																																
770																																																																
780																																																																