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# 1072 The Grand Canal, Venice



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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 Grand Canal, Venice

Stitch Count	
Horizontal:	594
Vertical:	434

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:	108	42.42	79	30.85	95	37.12	69	27	84	33	61	24
Including Margins:	124	49	95	37	111	44	85	34	100	40	77	31
	10				12				24			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	151	59.38	110	43.19	126	49.49	92	35.99	63	24.74	46	17.99
Including Margins:	167	66	126	50	142	56	108	42	79	31	62	24
	25				26				27			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	60	23.75	44	17.27	58	22.84	42	16.61	56	21.99	40	15.99
Including Margins:	76	30	60	24	74	29	58	23	72	28	56	22
	28				30				32			
	Width		Height		Width		Height		Width		Height	
	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Pattern:	54	21.21	39	15.42	50	19.79	36	14.39	47	18.55	34	13.49
Including Margins:	70	28	55	22	66	26	52	21	63	25	50	20

Solid Color Stitches. Use two strands of the specified color for these stitches.		
Symbol	DMC	Name
↑	221	Shell Pink-VY DK
☞	300	Mahogany-VY DK
■	310	Black
♥	311	Navy Blue-MD
♣	312	Baby Blue-VY DK
♠	317	Pewter Gray
☎	320	Pistachio Green-MD
♠	322	Baby Blue-DK
☞	334	Baby Blue-MD
?	341	Blue Violet-LT
›	356	Terra Cotta-MD
‡	368	Pistachio Green-LT
□	369	Pistachio Green-VY LT
‡	370	Mustard-MD
☎	414	Steel Gray-DK
☎	415	Pearl Gray
☎	422	Hazelnut Brown-LT
◀	435	Brown-VY LT
◀	452	Shell Gray-MD
✚	502	Blue Green
‡	503	Blue Green-MD
田	518	Wedgewood-LT
◀	520	Fern Green-DK
☎	522	Fern Green
‡	523	Fern Green-LT
☎	535	Ash Gray-VY LT
◀	580	Moss Green-DK
◀	611	Drab Brown
‡	612	Drab Brown-LT
+	613	Drab Brown-VY LT
☎	632	Desert Sand-UL VY DK
◀	640	Beige Gray-VY DK
◀	645	Beaver Gray-VY DK
◀	647	Beaver Gray-MD
5	648	Beaver Gray-LT
●	701	Christmas Green-LT
☎	702	Kelly Green
▲	730	Olive Green-VY DK
◀	733	Olive Green-MD
◀	734	Olive Green-LT
4	738	Tan-VY LT
›	739	Tan-UL VY LT
^	762	Pearl Gray-VY LT
↑	775	Baby Blue-VY LT
/	778	Antique Mauve-VY LT
☎	780	Topaz-UL VY DK
×	793	Cornflower Blue-MD
●	796	Royal Blue-DK
↓	797	Royal Blue
✚	798	Delft Blue-DK
^	799	Delft Blue-MD
∞	809	Delft Blue
..	813	Blue-LT

◀	819	Baby Pink-LT
◀	824	Blue-VY DK
✚	825	Blue-DK
♣	829	Golden Olive-VY DK
☎	831	Golden Olive-MD
♠	832	Golden Olive
↑	833	Golden Olive-LT
☎	834	Golden Olive-VY LT
●	839	Beige Brown-DK
↓	926	Gray Green-MD
2	927	Gray Green-LT
3	928	Gray Green-VY LT
➔	930	Antique Blue-DK
☎	931	Antique Blue-MD
○	932	Antique Blue-LT
☎	935	Avocado Green-DK
☎	937	Avocado Green-MD
●	938	Coffee Brown-UL DK
=	945	Tawny
∞	948	Peach-VY LT
○	951	Tawny-LT
☎	975	Golden Brown-DK
◀	976	Golden Brown-MD
☎	986	Forest Green-VY DK
-	3013	Khaki Green-LT
✚	3021	Brown Gray-VY DK
:	3024	Brown Gray-VY LT
✚	3032	Mocha Brown-MD
✓	3045	Yellow Beige-DK
⊕	3052	Green Gray-MD
•	3072	Beaver Gray-VY LT
α	3325	Baby Blue-LT
z	3347	Yellow Green-MD
‡	3362	Pine Green-DK
(	3713	Salmon-VY LT
☎	3747	Blue Violet-VY LT
♥	3753	Antique Blue-UL VY LT
7	3755	Baby Blue
n	3756	Baby Blue-UL VY LT
▼	3768	Gray Green-DK
☎	3778	Terra Cotta-LT
☎	3787	Brown Gray-DK
●	3799	Pewter Gray-VY DK
♦	3807	Cornflower Blue
=	3815	Celadon Green-DK
<	3822	Straw-LT
★	3826	Golden Brown
☎	3828	Hazelnut Brown
z	3829	Old Gold-VY DK
//	3838	Lavender Blue-DK
⊙	3839	Lavender Blue-MD
☎	3840	Lavender Blue-LT
)	3841	Baby Blue-Pale
◊	3861	Cocoa-LT
*	3862	Mocha Beige-DK
	3864	Mocha Beige-LT
u	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
н	407	Desert Sand-DK	3864	Mocha Beige-LT
☆	927	Gray Green-LT	415	Pearl Gray
‡	3861	Cocoa-LT	3864	Mocha Beige-LT
٪	3826	Golden Brown	3828	Hazelnut Brown
т	931	Antique Blue-MD	932	Antique Blue-LT
Ⓕ	3024	Brown Gray -VY LT	3072	Beaver Gray-VY LT
↖	414	Steel Gray-DK	503	Blue Green-MD
♠	926	Gray Green-MD	503	Blue Green-MD
♠	414	Steel Gray-DK	647	Beaver Gray-MD
●	310	Black	3799	Pewter Gray -VY DK
Ⓢ	415	Pearl Gray	932	Antique Blue-LT
1	3865	Winter White	3756	Baby Blue-UL VY LT
⓪	415	Pearl Gray	3753	Antique Blue-UL VY LT
⌘	611	Drab Brown	839	Beige Brown-DK
✕	926	Gray Green-MD	3848	Teal Green-MD
✱	611	Drab Brown	632	Desert Sand-UL VY DK
♠	611	Drab Brown	612	Drab Brown-LT
⌘	613	Drab Brown-VY LT	3864	Mocha Beige-LT
⊕	370	Mustard-MD	420	Hazelnut Brown-DK
⓪	739	Tan-UL VY LT	3024	Brown Gray-VY LT
Ⓢ	3756	Baby Blue-UL VY LT	775	Baby Blue-VY LT
▲	3346	Hunter Green	3862	Mocha Beige-DK
↔	648	Beaver Gray-LT	3024	Brown Gray -VY LT
▲	780	Topaz-UL VY DK	3829	Old Gold-VY DK
♠	975	Golden Brown-DK	3772	Desert Sand-VY DK
Ⓢ	3021	Brown Gray -VY DK	938	Coffee Brown-UL DK
☾	3726	Antique Mauve-DK	640	Beige Gray-VY DK
◇	300	Mahogany-VY DK	829	Golden Olive-VY DK
⓪	3046	Yellow Beige-MD	3856	Mahogany-UL VY LT
▼	3346	Hunter Green	645	Beaver Gray-VY DK
⊞	522	Fern Green	926	Gray Green-MD
△	369	Pistachio Green-VY LT	928	Gray Green-VY LT
♠	3866	Mocha Brown-UL VY LT	819	Baby Pink-LT
↔	928	Gray Green-VY LT	452	Shell Gray-MD
+	798	Delft Blue-DK	825	Blue-DK
▶	322	Baby Blue-DK	825	Blue-DK
✕	798	Delft Blue-DK	334	Baby Blue-MD
†	322	Baby Blue-DK	3760	Wedgewood-MD
⌘	334	Baby Blue-MD	3839	Lavender Blue-MD
⌘	798	Delft Blue-DK	3839	Lavender Blue-MD
⌘	322	Baby Blue-DK	798	Delft Blue-DK
⓪	799	Delft Blue-MD	826	Blue-MD
■	312	Baby Blue-VY DK	322	Baby Blue-DK
m	809	Delft Blue	341	Blue Violet-LT
⌘	3747	Blue Violet-VY LT	793	Cornflower Blue-MD
⓪	341	Blue Violet-LT	3839	Lavender Blue-MD
⇒	3841	Baby Blue-Pale	3747	Blue Violet-VY LT
v	211	Lavender-LT	775	Baby Blue-VY LT
⓪	3747	Blue Violet-VY LT	341	Blue Violet-LT
l	211	Lavender-LT	3756	Baby Blue-UL VY LT
↗	798	Delft Blue-DK	799	Delft Blue-MD

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III	813	Blue-LT	3839	Lavender Blue-MD
III	809	Delft Blue	3839	Lavender Blue-MD
√	3840	Lavender Blue-LT	809	Delft Blue
↓	3839	Lavender Blue-MD	3843	Electric Blue
▲	3041	Antique Violet-MD	926	Gray Green-MD
■	3815	Celadon Green-DK	3768	Gray Green-DK
⌂	3713	Salmon-VY LT	762	Pearl Gray-VY LT
◇	648	Beaver Gray-LT	778	Antique Mauve-VY LT
▷	613	Drab Brown-VY LT	951	Tawny -LT
⊕	613	Drab Brown-VY LT	945	Tawny
●	732	Olive Green	780	Topaz-UL VY DK
◎	732	Olive Green	3829	Old Gold-VY DK
◀	611	Drab Brown	730	Olive Green-VY DK
⋮	926	Gray Green-MD	992	Aquamarine-MD
⊠	729	Old Gold-MD	3046	Yellow Beige-MD
∇	783	Topaz-MD	832	Golden Olive
⋈	3820	Straw -DK	729	Old Gold-MD
■	935	Avocado Green-DK	310	Black
⌂	3021	Brown Gray-VY DK	937	Avocado Green-MD
⌂	580	Moss Green-DK	611	Drab Brown
◁	927	Gray Green-LT	3849	Teal Green-LT
◐	645	Beaver Gray-VY DK	3815	Celadon Green-DK
✦	645	Beaver Gray-VY DK	320	Pistachio Green-MD
✧	732	Olive Green	829	Golden Olive-VY DK
◆	829	Golden Olive-VY DK	938	Coffee Brown-UL DK
✚	3346	Hunter Green	520	Fern Green-DK
↓	935	Avocado Green-DK	520	Fern Green-DK
∇	927	Gray Green-LT	647	Beaver Gray-MD
×	415	Pearl Gray	931	Antique Blue-MD
☉	829	Golden Olive-VY DK	831	Golden Olive-MD
↻	503	Blue Green-MD	317	Pewter Gray
●	580	Moss Green-DK	937	Avocado Green-MD
✱	3347	Yellow Green-MD	611	Drab Brown
✧	3815	Celadon Green-DK	320	Pistachio Green-MD
::	647	Beaver Gray-MD	648	Beaver Gray-LT
✚	3346	Hunter Green	522	Fern Green
☑	3041	Antique Violet-MD	3861	Cocoa-LT
≡	3839	Lavender Blue-MD	799	Delft Blue-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	
211	Lavender-LT	1564	615	1490	586	1341	527
221	Shell Pink-VY DK	11	4	10	3	9	3
300	Mahogany-VY DK	87	34	83	32	74	29
310	Black	1575	620	1500	590	1350	531
311	Navy Blue-MD	6	2	5	1	5	1
312	Baby Blue-VY DK	29	11	27	10	25	9
317	Pewter Gray	153	60	146	57	131	51
320	Pistachio Green-MD	403	158	384	151	345	135
322	Baby Blue-DK	240	94	229	90	206	81
334	Baby Blue-MD	411	161	392	154	352	138
341	Blue Violet-LT	1470	578	1400	551	1260	496
356	Terra Cotta-MD	12	4	12	4	10	3
368	Pistachio Green-LT	9	3	8	3	7	2
369	Pistachio Green-VY LT	25	9	24	9	21	8
370	Mustard-MD	549	216	522	205	470	185
407	Desert Sand-DK	87	34	83	32	75	29
414	Steel Gray-DK	494	194	470	185	423	166
415	Pearl Gray	2094	824	1994	785	1795	706
420	Hazelnut Brown-DK	175	68	167	65	150	59
422	Hazelnut Brown-LT	134	52	127	50	115	45
435	Brown-VY LT	25	9	24	9	21	8
452	Shell Gray-MD	541	212	515	202	463	182
502	Blue Green	293	115	279	109	251	98
503	Blue Green-MD	521	205	496	195	447	175
518	Wedgewood-LT	29	11	27	10	24	9
520	Fern Green-DK	521	205	496	195	446	175
522	Fern Green	865	340	824	324	741	291
523	Fern Green-LT	168	66	160	62	144	56
535	Ash Gray -VY LT	155	61	147	57	133	52
580	Moss Green-DK	298	117	284	111	255	100
611	Drab Brown	1217	479	1159	456	1043	410
612	Drab Brown-LT	700	275	666	262	600	236
613	Drab Brown-VY LT	880	346	839	330	755	297
632	Desert Sand-UL VY DK	76	29	72	28	65	25
640	Beige Gray-VY DK	447	175	425	167	383	150
645	Beaver Gray-VY DK	835	328	795	312	715	281
647	Beaver Gray-MD	1168	459	1112	437	1001	394
648	Beaver Gray-LT	1065	419	1014	399	912	359
701	Christmas Green-LT	13	5	13	5	11	4
702	Kelly Green	7	2	7	2	6	2
729	Old Gold-MD	44	17	42	16	38	14
730	Olive Green-VY DK	317	124	302	118	272	107
732	Olive Green	429	168	408	160	367	144
733	Olive Green-MD	86	33	82	32	74	29
734	Olive Green-LT	46	18	44	17	39	15
738	Tan-VY LT	176	69	168	66	151	59
739	Tan-UL VY LT	295	116	281	110	253	99
762	Pearl Gray-VY LT	657	258	626	246	563	221
775	Baby Blue-VY LT	4212	1658	4012	1579	3611	1421
778	Antique Mauve-VY LT	238	93	227	89	204	80
780	Topaz-UL VY DK	238	93	227	89	204	80
783	Topaz-MD	70	27	66	25	60	23
793	Cornflower Blue-MD	276	108	263	103	236	92
796	Royal Blue-DK	29	11	28	11	25	9

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797	Royal Blue	122	48	116	45	105	41
798	Delft Blue-DK	609	239	580	228	522	205
799	Delft Blue-MD	877	345	835	328	752	296
809	Delft Blue	1944	765	1852	729	1667	656
813	Blue-LT	614	241	585	230	526	207
819	Baby Pink-LT	321	126	305	120	275	108
824	Blue-VY DK	31	12	29	11	26	10
825	Blue-DK	309	121	294	115	265	104
826	Blue-MD	283	111	269	105	242	95
829	Golden Olive-VY DK	585	230	557	219	501	197
831	Golden Olive-MD	406	159	386	151	348	137
832	Golden Olive	364	143	347	136	312	122
833	Golden Olive-LT	96	37	91	35	82	32
834	Golden Olive-VY LT	11	4	10	3	9	3
839	Beige Brown-DK	259	101	247	97	222	87
926	Gray Green-MD	733	288	698	274	628	247
927	Gray Green-LT	852	335	811	319	730	287
928	Gray Green-VY LT	487	191	464	182	417	164
930	Antique Blue-DK	17	6	16	6	14	5
931	Antique Blue-MD	398	156	379	149	341	134
932	Antique Blue-LT	553	217	526	207	474	186
935	Avocado Green-DK	564	222	537	211	483	190
937	Avocado Green-MD	422	166	402	158	362	142
938	Coffee Brown-UL DK	445	175	424	166	381	150
945	Tawny	91	35	87	34	78	30
948	Peach-VY LT	42	16	40	15	36	14
951	Tawny-LT	108	42	102	40	92	36
975	Golden Brown-DK	89	35	84	33	76	29
976	Golden Brown-MD	13	5	13	5	11	4
986	Forest Green-VY DK	9	3	9	3	8	3
992	Aquamarine-MD	81	31	77	30	69	27
3013	Khaki Green-LT	399	157	380	149	342	134
3021	Brown Gray -VY DK	451	177	430	169	387	152
3024	Brown Gray -VY LT	1025	403	976	384	878	345
3032	Mocha Brown-MD	596	234	568	223	511	201
3041	Antique Violet-MD	103	40	98	38	88	34
3045	Yellow Beige-DK	281	110	268	105	241	94
3046	Yellow Beige-MD	43	16	40	15	36	14
3052	Green Gray-MD	568	223	541	212	486	191
3072	Beaver Gray-VY LT	557	219	531	209	478	188
3325	Baby Blue-LT	163	64	155	61	140	55
3346	Hunter Green	919	361	875	344	787	309
3347	Yellow Green-MD	202	79	192	75	173	68
3362	Pine Green-DK	497	195	473	186	426	167
3713	Salmon-VY LT	142	55	135	53	122	48
3726	Antique Mauve-DK	32	12	31	12	28	11
3747	Blue Violet-VY LT	4492	1768	4278	1684	3850	1515
3753	Antique Blue-UL VY LT	690	271	657	258	592	233
3755	Baby Blue	139	54	132	51	119	46
3756	Baby Blue-UL VY LT	8745	3442	8328	3278	7495	2950
3760	Wedgewood-MD	25	9	24	9	22	8
3768	Gray Green-DK	81	31	77	30	69	27
3772	Desert Sand-VY DK	17	6	16	6	15	5
3778	Terra Cotta-LT	17	6	16	6	14	5
3787	Brown Gray -DK	236	92	225	88	202	79
3799	Pewter Gray -VY DK	152	59	145	57	130	51
3807	Cornflower Blue	33	12	31	12	28	11
3815	Celadon Green-DK	276	108	262	103	236	92
3820	Straw -DK	20	7	19	7	17	6

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3822	Straw-LT	5	1	5	1	4	1
3826	Golden Brown	57	22	54	21	49	19
3828	Hazelnut Brown	248	97	236	92	213	83
3829	Old Gold-VY DK	444	174	423	166	381	150
3838	Lavender Blue-DK	34	13	33	12	29	11
3839	Lavender Blue-MD	1684	662	1604	631	1444	568
3840	Lavender Blue-LT	1393	548	1326	522	1194	470
3841	Baby Blue-Pale	2257	888	2149	846	1934	761
3843	Electric Blue	182	71	174	68	156	61
3848	Teal Green-MD	57	22	54	21	49	19
3849	Teal Green-LT	95	37	90	35	81	31
3856	Mahogany-UL VY LT	18	7	17	6	15	5
3861	Cocoa-LT	425	167	405	159	364	143
3862	Mocha Beige-DK	368	144	350	137	315	124
3864	Mocha Beige-LT	1235	486	1176	462	1058	416
3865	Winter White	4586	1805	4367	1719	3930	1547
3866	Mocha Brown-UL VY LT	508	200	484	190	436	171

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		10		12		24	
211	Lavender-LT	2414	949	2012	791	1006	395
221	Shell Pink-VY DK	16	5	14	5	7	2
300	Mahogany-VY DK	133	52	111	44	56	22
310	Black	2430	956	2025	797	1013	398
311	Navy Blue-MD	9	2	8	2	4	1
312	Baby Blue-VY DK	45	16	38	14	19	7
317	Pewter Gray	236	92	197	77	98	38
320	Pistachio Green-MD	621	243	518	203	259	101
322	Baby Blue-DK	371	146	309	122	155	61
334	Baby Blue-MD	634	248	528	207	264	104
341	Blue Violet-LT	2268	893	1890	744	945	372
356	Terra Cotta-MD	18	5	15	5	8	2
368	Pistachio Green-LT	13	4	11	3	5	2
369	Pistachio Green-VY LT	38	14	32	12	16	6
370	Mustard-MD	846	333	705	278	353	139
407	Desert Sand-DK	135	52	113	44	56	22
414	Steel Gray-DK	761	299	635	249	317	125
415	Pearl Gray	3231	1271	2693	1059	1346	530
420	Hazelnut Brown-DK	270	106	225	89	113	44
422	Hazelnut Brown-LT	207	81	173	68	86	34
435	Brown-VY LT	38	14	32	12	16	6
452	Shell Gray-MD	833	328	695	273	347	137
502	Blue Green	452	176	377	147	188	74
503	Blue Green-MD	805	315	671	263	335	131
518	Wedgewood-LT	43	16	36	14	18	7
520	Fern Green-DK	803	315	669	263	335	131
522	Fern Green	1334	524	1112	437	556	218
523	Fern Green-LT	259	101	216	84	108	42
535	Ash Gray-VY LT	239	94	200	78	100	39
580	Moss Green-DK	459	180	383	150	191	75
611	Drab Brown	1877	738	1565	615	782	308
612	Drab Brown-LT	1080	425	900	354	450	177
613	Drab Brown-VY LT	1359	535	1133	446	566	223
632	Desert Sand-UL VY DK	117	45	98	38	49	19
640	Beige Gray-VY DK	689	270	575	225	287	113

645	Beaver Gray-VY DK	1287	506	1073	422	536	211
647	Beaver Gray-MD	1802	709	1502	591	751	296
648	Beaver Gray-LT	1642	646	1368	539	684	269
701	Christmas Green-LT	20	7	17	6	8	3
702	Kelly Green	11	4	9	3	5	2
729	Old Gold-MD	68	25	57	21	29	11
730	Olive Green-VY DK	490	193	408	161	204	80
732	Olive Green	661	259	551	216	275	108
733	Olive Green-MD	133	52	111	44	56	22
734	Olive Green-LT	70	27	59	23	29	11
738	Tan-VY LT	272	106	227	89	113	44
739	Tan-UL VY LT	455	178	380	149	190	74
762	Pearl Gray-VY LT	1013	398	845	332	422	166
775	Baby Blue-VY LT	6500	2558	5417	2132	2708	1066
778	Antique Mauve-VY LT	367	144	306	120	153	60
780	Topaz-UL VY DK	367	144	306	120	153	60
783	Topaz-MD	108	41	90	35	45	17
793	Cornflower Blue-MD	425	166	354	138	177	69
796	Royal Blue-DK	45	16	38	14	19	7
797	Royal Blue	189	74	158	62	79	31
798	Delft Blue-DK	940	369	783	308	392	154
799	Delft Blue-MD	1354	533	1128	444	564	222
809	Delft Blue	3001	1181	2501	984	1250	492
813	Blue-LT	947	373	789	311	395	155
819	Baby Pink-LT	495	194	413	162	206	81
824	Blue-VY DK	47	18	39	15	20	8
825	Blue-DK	477	187	398	156	199	78
826	Blue-MD	436	171	363	143	182	71
829	Golden Olive-VY DK	902	355	752	296	376	148
831	Golden Olive-MD	626	247	522	206	261	103
832	Golden Olive	562	220	468	183	234	92
833	Golden Olive-LT	148	58	123	48	62	24
834	Golden Olive-VY LT	16	5	14	5	7	2
839	Beige Brown-DK	400	157	333	131	167	65
926	Gray Green-MD	1130	445	942	371	471	185
927	Gray Green-LT	1314	517	1095	431	548	215
928	Gray Green-VY LT	751	295	626	246	313	123
930	Antique Blue-DK	25	9	21	8	11	4
931	Antique Blue-MD	614	241	512	201	256	101
932	Antique Blue-LT	853	335	711	279	356	140
935	Avocado Green-DK	869	342	725	285	362	143
937	Avocado Green-MD	652	256	543	213	272	107
938	Coffee Brown-UL DK	686	270	572	225	286	113
945	Tawny	140	54	117	45	59	23
948	Peach-VY LT	65	25	54	21	27	11
951	Tawny-LT	166	65	138	54	69	27
975	Golden Brown-DK	137	52	114	44	57	22
976	Golden Brown-MD	20	7	17	6	8	3
986	Forest Green-VY DK	14	5	12	5	6	2
992	Aquamarine-MD	124	49	104	41	52	20
3013	Khaki Green-LT	616	241	513	201	257	101
3021	Brown Gray-VY DK	697	274	581	228	290	114
3024	Brown Gray-VY LT	1580	621	1317	518	659	259
3032	Mocha Brown-MD	920	362	767	302	383	151
3041	Antique Violet-MD	158	61	132	51	66	26
3045	Yellow Beige-DK	434	169	362	141	181	71
3046	Yellow Beige-MD	65	25	54	21	27	11
3052	Green Gray-MD	875	344	729	287	365	143
3072	Beaver Gray-VY LT	860	338	717	282	359	141

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3325	Baby Blue-LT	252	99	210	83	105	41
3346	Hunter Green	1417	556	1181	464	590	232
3347	Yellow Green-MD	311	122	260	102	130	51
3362	Pine Green-DK	767	301	639	251	320	125
3713	Salmon-VY LT	220	86	183	72	92	36
3726	Antique Mauve-DK	50	20	42	17	21	8
3747	Blue Violet-VY LT	6930	2727	5775	2273	2888	1136
3753	Antique Blue-UL VY LT	1066	419	888	350	444	175
3755	Baby Blue	214	83	179	69	89	35
3756	Baby Blue-UL VY LT	13491	5310	11243	4425	5621	2213
3760	Wedgewood-MD	40	14	33	12	17	6
3768	Gray Green-DK	124	49	104	41	52	20
3772	Desert Sand-VY DK	27	9	23	8	11	4
3778	Terra Cotta-LT	25	9	21	8	11	4
3787	Brown Gray -DK	364	142	303	119	152	59
3799	Pewter Gray -VY DK	234	92	195	77	98	38
3807	Cornflower Blue	50	20	42	17	21	8
3815	Celadon Green-DK	425	166	354	138	177	69
3820	Straw -DK	31	11	26	9	13	5
3822	Straw -LT	7	2	6	2	3	1
3826	Golden Brown	88	34	74	29	37	14
3828	Hazelnut Brown	383	149	320	125	160	62
3829	Old Gold-VY DK	686	270	572	225	286	113
3838	Lavender Blue-DK	52	20	44	17	22	8
3839	Lavender Blue-MD	2599	1022	2166	852	1083	426
3840	Lavender Blue-LT	2149	846	1791	705	896	353
3841	Baby Blue-Pale	3481	1370	2901	1142	1451	571
3843	Electric Blue	281	110	234	92	117	46
3848	Teal Green-MD	88	34	74	29	37	14
3849	Teal Green-LT	146	56	122	47	61	23
3856	Mahogany-UL VY LT	27	9	23	8	11	4
3861	Cocoa-LT	655	257	546	215	273	107
3862	Mocha Beige-DK	567	223	473	186	236	93
3864	Mocha Beige-LT	1904	749	1587	624	794	312
3865	Winter White	7074	2785	5895	2321	2948	1160
3866	Mocha Brown-UL VY LT	785	308	654	257	327	128

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		25		26		27	
211	Lavender-LT	966	379	928	365	894	351
221	Shell Pink-VY DK	6	2	6	2	6	2
300	Mahogany-VY DK	53	21	51	20	49	19
310	Black	972	382	935	368	900	354
311	Navy Blue-MD	4	1	3	1	3	1
312	Baby Blue-VY DK	18	6	17	6	17	6
317	Pewter Gray	94	37	91	35	87	34
320	Pistachio Green-MD	248	97	239	93	230	90
322	Baby Blue-DK	148	58	143	56	137	54
334	Baby Blue-MD	253	99	244	96	235	92
341	Blue Violet-LT	907	357	872	343	840	331
356	Terra Cotta-MD	7	2	7	2	7	2
368	Pistachio Green-LT	5	1	5	1	5	1
369	Pistachio Green-VY LT	15	6	15	6	14	5
370	Mustard-MD	338	133	325	128	313	123
407	Desert Sand-DK	54	21	52	20	50	19

414	Steel Gray-DK	305	120	293	115	282	111
415	Pearl Gray	1292	508	1243	489	1197	471
420	Hazelnut Brown-DK	108	42	104	41	100	39
422	Hazelnut Brown-LT	83	32	80	31	77	30
435	Brown-VY LT	15	6	15	6	14	5
452	Shell Gray-MD	333	131	321	126	309	121
502	Blue Green	181	71	174	68	167	65
503	Blue Green-MD	322	126	309	121	298	117
518	Wedgewood-LT	17	6	17	6	16	6
520	Fern Green-DK	321	126	309	121	297	117
522	Fern Green	534	210	513	201	494	194
523	Fern Green-LT	104	40	100	39	96	37
535	Ash Gray -VY LT	96	37	92	36	89	35
580	Moss Green-DK	184	72	177	69	170	67
611	Drab Brown	751	295	722	284	695	273
612	Drab Brown-LT	432	170	415	163	400	157
613	Drab Brown-VY LT	544	214	523	206	503	198
632	Desert Sand-UL VY DK	47	18	45	17	43	17
640	Beige Gray-VY DK	276	108	265	104	255	100
645	Beaver Gray-VY DK	515	202	495	195	477	187
647	Beaver Gray-MD	721	284	693	273	667	263
648	Beaver Gray-LT	657	258	631	249	608	239
701	Christmas Green-LT	8	3	8	3	7	3
702	Kelly Green	4	1	4	1	4	1
729	Old Gold-MD	27	10	26	10	25	9
730	Olive Green-VY DK	196	77	188	74	181	71
732	Olive Green	264	104	254	100	245	96
733	Olive Green-MD	53	21	51	20	49	19
734	Olive Green-LT	28	11	27	10	26	10
738	Tan-VY LT	109	42	105	41	101	39
739	Tan-UL VY LT	182	71	175	69	169	66
762	Pearl Gray-VY LT	405	159	390	153	375	147
775	Baby Blue-VY LT	2600	1023	2500	984	2407	947
778	Antique Mauve-VY LT	147	58	141	55	136	53
780	Topaz-UL VY DK	147	58	141	55	136	53
783	Topaz-MD	43	17	42	16	40	15
793	Cornflower Blue-MD	170	66	163	64	157	61
796	Royal Blue-DK	18	6	17	6	17	6
797	Royal Blue	76	30	73	28	70	27
798	Delft Blue-DK	376	148	361	142	348	137
799	Delft Blue-MD	541	213	521	205	501	197
809	Delft Blue	1200	472	1154	454	1111	437
813	Blue-LT	379	149	364	143	351	138
819	Baby Pink-LT	198	78	190	75	183	72
824	Blue-VY DK	19	7	18	7	17	7
825	Blue-DK	191	75	183	72	177	69
826	Blue-MD	174	68	168	66	161	63
829	Golden Olive-VY DK	361	142	347	136	334	131
831	Golden Olive-MD	251	99	241	95	232	91
832	Golden Olive	225	88	216	84	208	81
833	Golden Olive-LT	59	23	57	22	55	21
834	Golden Olive-VY LT	6	2	6	2	6	2
839	Beige Brown-DK	160	63	154	60	148	58
926	Gray Green-MD	452	178	435	171	419	165
927	Gray Green-LT	526	207	505	199	487	191
928	Gray Green-VY LT	300	118	289	114	278	109
930	Antique Blue-DK	10	4	10	3	9	3
931	Antique Blue-MD	246	96	236	93	227	89
932	Antique Blue-LT	341	134	328	129	316	124

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935	Avocado Green-DK	348	137	334	132	322	127
937	Avocado Green-MD	261	102	251	98	241	95
938	Coffee Brown-UL DK	274	108	264	104	254	100
945	Tawny	56	22	54	21	52	20
948	Peach-VY LT	26	10	25	10	24	9
951	Tawny -LT	66	26	64	25	61	24
975	Golden Brown-DK	55	21	53	20	51	19
976	Golden Brown-MD	8	3	8	3	7	3
986	Forest Green-VY DK	6	2	6	2	5	2
992	Aquamarine-MD	50	19	48	19	46	18
3013	Khaki Green-LT	246	96	237	93	228	89
3021	Brown Gray -VY DK	279	109	268	105	258	101
3024	Brown Gray -VY LT	632	248	608	239	585	230
3032	Mocha Brown-MD	368	145	354	139	341	134
3041	Antique Violet-MD	63	24	61	24	59	23
3045	Yellow Beige-DK	174	68	167	65	161	63
3046	Yellow Beige-MD	26	10	25	10	24	9
3052	Green Gray-MD	350	138	336	132	324	127
3072	Beaver Gray-VY LT	344	135	331	130	319	125
3325	Baby Blue-LT	101	40	97	38	93	37
3346	Hunter Green	567	222	545	214	525	206
3347	Yellow Green-MD	125	49	120	47	115	45
3362	Pine Green-DK	307	120	295	116	284	111
3713	Salmon-VY LT	88	35	84	33	81	32
3726	Antique Mauve-DK	20	8	19	8	19	7
3747	Blue Violet-VY LT	2772	1091	2665	1049	2567	1010
3753	Antique Blue-UL VY LT	426	168	410	161	395	155
3755	Baby Blue	86	33	82	32	79	31
3756	Baby Blue-UL VY LT	5396	2124	5189	2042	4997	1967
3760	Wedgewood-MD	16	6	15	6	15	5
3768	Gray Green-DK	50	19	48	19	46	18
3772	Desert Sand-VY DK	11	4	10	3	10	3
3778	Terra Cotta-LT	10	4	10	3	9	3
3787	Brown Gray -DK	145	57	140	55	135	53
3799	Pewter Gray -VY DK	94	37	90	35	87	34
3807	Cornflower Blue	20	8	19	8	19	7
3815	Celadon Green-DK	170	66	163	64	157	61
3820	Straw -DK	12	4	12	4	11	4
3822	Straw -LT	3	1	3	1	3	1
3826	Golden Brown	35	14	34	13	33	13
3828	Hazelnut Brown	153	60	147	57	142	55
3829	Old Gold-VY DK	274	108	264	104	254	100
3838	Lavender Blue-DK	21	8	20	8	19	7
3839	Lavender Blue-MD	1040	409	1000	393	963	379
3840	Lavender Blue-LT	860	338	827	325	796	313
3841	Baby Blue-Pale	1392	548	1339	527	1289	507
3843	Electric Blue	112	44	108	42	104	41
3848	Teal Green-MD	35	14	34	13	33	13
3849	Teal Green-LT	58	22	56	21	54	21
3856	Mahogany-UL VY LT	11	4	10	3	10	3
3861	Cocoa-LT	262	103	252	99	243	95
3862	Mocha Beige-DK	227	89	218	86	210	83
3864	Mocha Beige-LT	762	300	732	288	705	277
3865	Winter White	2830	1114	2721	1071	2620	1031
3866	Mocha Brown-UL VY LT	314	123	302	118	291	114

Extended thread usage table.							
DMC	Name	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)	Usage (cm)	Usage (inch)
		28		30		32	
211	Lavender-LT	862	339	805	316	754	296
221	Shell Pink-VY DK	6	2	5	2	5	2
300	Mahogany-VY DK	48	19	44	17	42	16
310	Black	868	341	810	319	759	299
311	Navy Blue-MD	3	1	3	1	3	1
312	Baby Blue-VY DK	16	6	15	5	14	5
317	Pewter Gray	84	33	79	31	74	29
320	Pistachio Green-MD	222	87	207	81	194	76
322	Baby Blue-DK	132	52	124	49	116	46
334	Baby Blue-MD	226	89	211	83	198	78
341	Blue Violet-LT	810	319	756	298	709	279
356	Terra Cotta-MD	6	2	6	2	6	2
368	Pistachio Green-LT	5	1	4	1	4	1
369	Pistachio Green-VY LT	14	5	13	5	12	5
370	Mustard-MD	302	119	282	111	264	104
407	Desert Sand-DK	48	19	45	17	42	16
414	Steel Gray-DK	272	107	254	100	238	93
415	Pearl Gray	1154	454	1077	424	1010	397
420	Hazelnut Brown-DK	96	38	90	35	84	33
422	Hazelnut Brown-LT	74	29	69	27	65	25
435	Brown-VY LT	14	5	13	5	12	5
452	Shell Gray-MD	298	117	278	109	260	102
502	Blue Green	161	63	151	59	141	55
503	Blue Green-MD	287	113	268	105	251	98
518	Wedgewood-LT	15	6	14	5	14	5
520	Fern Green-DK	287	113	268	105	251	98
522	Fern Green	476	187	445	175	417	164
523	Fern Green-LT	93	36	86	34	81	32
535	Ash Gray -VY LT	86	33	80	31	75	29
580	Moss Green-DK	164	64	153	60	143	56
611	Drab Brown	671	264	626	246	587	231
612	Drab Brown-LT	386	152	360	142	338	133
613	Drab Brown-VY LT	485	191	453	178	425	167
632	Desert Sand-UL VY DK	42	16	39	15	37	14
640	Beige Gray-VY DK	246	96	230	90	215	84
645	Beaver Gray-VY DK	460	181	429	169	402	158
647	Beaver Gray-MD	644	253	601	236	563	222
648	Beaver Gray-LT	586	231	547	215	513	202
701	Christmas Green-LT	7	3	7	2	6	2
702	Kelly Green	4	1	4	1	3	1
729	Old Gold-MD	24	9	23	8	21	8
730	Olive Green-VY DK	175	69	163	64	153	60
732	Olive Green	236	93	220	86	206	81
733	Olive Green-MD	48	19	44	17	42	16
734	Olive Green-LT	25	10	23	9	22	8
738	Tan-VY LT	97	38	91	35	85	33
739	Tan-UL VY LT	163	64	152	59	142	56
762	Pearl Gray-VY LT	362	142	338	133	317	124
775	Baby Blue-VY LT	2321	914	2167	853	2031	799
778	Antique Mauve-VY LT	131	51	122	48	115	45
780	Topaz-UL VY DK	131	51	122	48	115	45
783	Topaz-MD	39	15	36	14	34	13
793	Cornflower Blue-MD	152	59	142	55	133	52
796	Royal Blue-DK	16	6	15	5	14	5

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797	Royal Blue	68	26	63	25	59	23
798	Delft Blue-DK	336	132	313	123	294	115
799	Delft Blue-MD	483	190	451	178	423	167
809	Delft Blue	1072	422	1000	394	938	369
813	Blue-LT	338	133	316	124	296	116
819	Baby Pink-LT	177	69	165	65	155	61
824	Blue-VY DK	17	6	16	6	15	6
825	Blue-DK	170	67	159	62	149	59
826	Blue-MD	156	61	145	57	136	53
829	Golden Olive-VY DK	322	127	301	118	282	111
831	Golden Olive-MD	224	88	209	82	196	77
832	Golden Olive	201	78	187	73	176	69
833	Golden Olive-LT	53	21	49	19	46	18
834	Golden Olive-VY LT	6	2	5	2	5	2
839	Beige Brown-DK	143	56	133	52	125	49
926	Gray Green-MD	404	159	377	148	353	139
927	Gray Green-LT	469	185	438	172	411	161
928	Gray Green-VY LT	268	105	250	98	235	92
930	Antique Blue-DK	9	3	8	3	8	3
931	Antique Blue-MD	219	86	205	80	192	75
932	Antique Blue-LT	305	120	284	112	267	105
935	Avocado Green-DK	311	122	290	114	272	107
937	Avocado Green-MD	233	91	217	85	204	80
938	Coffee Brown-UL DK	245	96	229	90	214	84
945	Tawny	50	19	47	18	44	17
948	Peach-VY LT	23	9	22	8	20	8
951	Tawny-LT	59	23	55	22	52	20
975	Golden Brown-DK	49	19	46	17	43	16
976	Golden Brown-MD	7	3	7	2	6	2
986	Forest Green-VY DK	5	2	5	2	5	2
992	Aquamarine-MD	44	17	41	16	39	15
3013	Khaki Green-LT	220	86	205	80	192	75
3021	Brown Gray -VY DK	249	98	232	91	218	86
3024	Brown Gray -VY LT	564	222	527	207	494	194
3032	Mocha Brown-MD	329	129	307	121	287	113
3041	Antique Violet-MD	57	22	53	20	50	19
3045	Yellow Beige-DK	155	60	145	56	136	53
3046	Yellow Beige-MD	23	9	22	8	20	8
3052	Green Gray-MD	312	123	292	115	273	107
3072	Beaver Gray-VY LT	307	121	287	113	269	106
3325	Baby Blue-LT	90	35	84	33	79	31
3346	Hunter Green	506	199	472	185	443	174
3347	Yellow Green-MD	111	44	104	41	97	38
3362	Pine Green-DK	274	107	256	100	240	94
3713	Salmon-VY LT	78	31	73	29	69	27
3726	Antique Mauve-DK	18	7	17	7	16	6
3747	Blue Violet-VY LT	2475	974	2310	909	2166	852
3753	Antique Blue-UL VY LT	381	150	355	140	333	131
3755	Baby Blue	77	30	71	28	67	26
3756	Baby Blue-UL VY LT	4818	1896	4497	1770	4216	1659
3760	Wedgewood-MD	14	5	13	5	12	5
3768	Gray Green-DK	44	17	41	16	39	15
3772	Desert Sand-VY DK	10	3	9	3	8	3
3778	Terra Cotta-LT	9	3	8	3	8	3
3787	Brown Gray -DK	130	51	121	47	114	44
3799	Pewter Gray -VY DK	84	33	78	31	73	29
3807	Cornflower Blue	18	7	17	7	16	6
3815	Celadon Green-DK	152	59	142	55	133	52
3820	Straw -DK	11	4	10	4	10	3

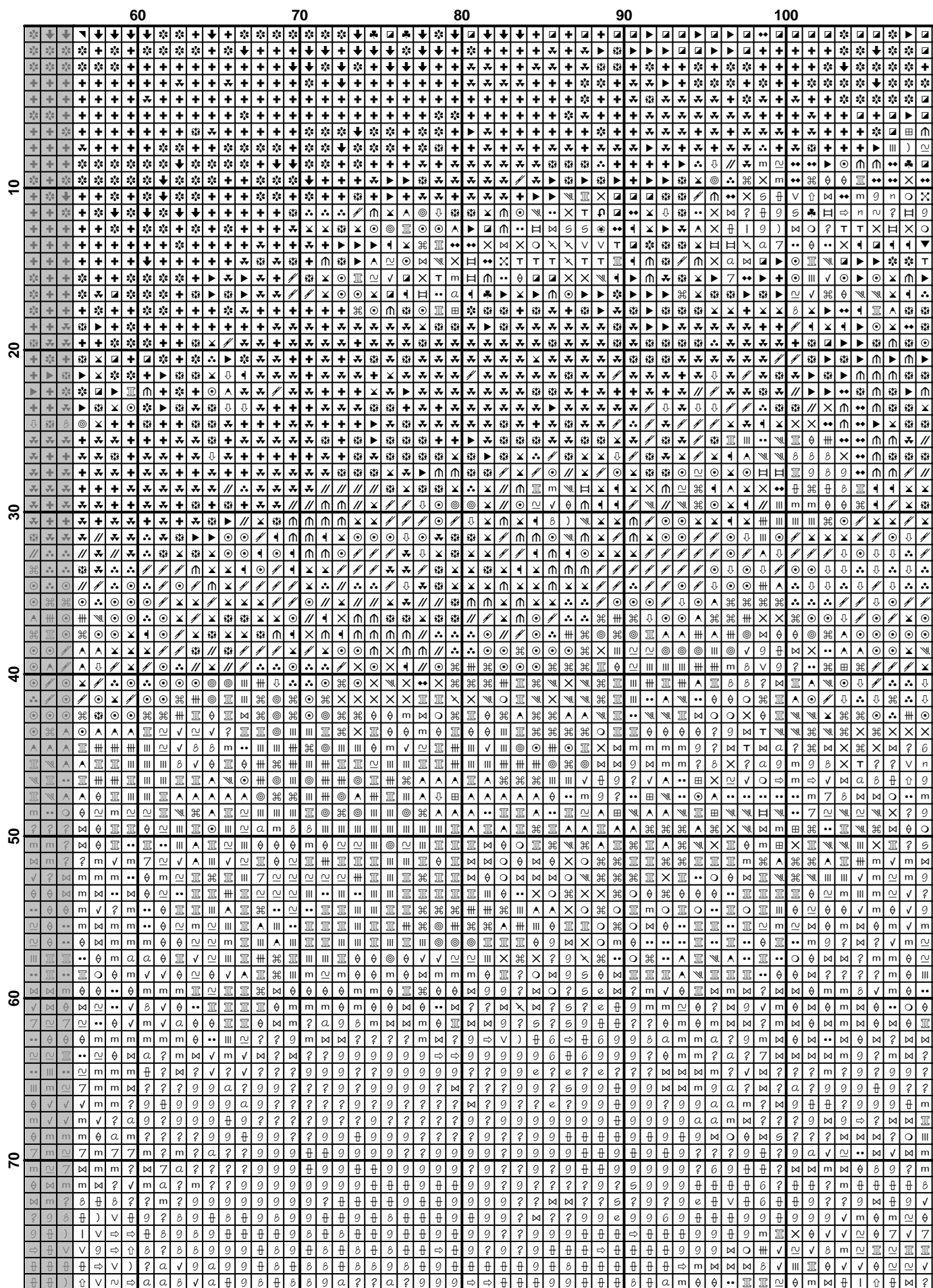
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3822	Straw-LT	3	1	2	1	2	1
3826	Golden Brown	32	12	29	11	28	11
3828	Hazelnut Brown	137	53	128	50	120	47
3829	Old Gold-VY DK	245	96	229	90	214	84
3838	Lavender Blue-DK	19	7	17	7	16	6
3839	Lavender Blue-MD	928	365	866	341	812	320
3840	Lavender Blue-LT	768	302	716	282	672	264
3841	Baby Blue-Pale	1243	489	1160	457	1088	428
3843	Electric Blue	100	39	94	37	88	34
3848	Teal Green-MD	32	12	29	11	28	11
3849	Teal Green-LT	52	20	49	19	46	17
3856	Mahogany-UL VY LT	10	3	9	3	8	3
3861	Cocoa-LT	234	92	218	86	205	80
3862	Mocha Beige-DK	203	80	189	74	177	70
3864	Mocha Beige-LT	680	267	635	250	595	234
3865	Winter White	2526	995	2358	928	2211	870
3866	Mocha Brown-UL VY LT	280	110	262	103	245	96

[illegible]



	110	120	130	140	150	160
10	...	...	...	...	...	...
20	...	...	...	...	...	...
30	...	...	...	...	...	...
40	...	...	...	...	...	...
50	...	...	...	...	...	...
60	...	...	...	...	...	...
70	...	...	...	...	...	...

	160	170	180	190	200	210
10	...	...	...	...	...	...
20	...	...	...	...	...	...
30	...	...	...	...	...	...
40	...	...	...	...	...	...
50	...	...	...	...	...	...
60	...	...	...	...	...	...
70	...	...	...	...	...	...

$$(17) \quad \frac{d}{dt} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$$

	270	280	290	300	310	320
10	...	...	...	...	...	...
20	...	...	...	...	...	...
30	...	...	...	...	...	...
40	...	...	...	...	...	...
50	...	...	...	...	...	...
60	...	...	...	...	...	...
70	...	...	...	...	...	...

	320	330	340	350	360	370
10	X	X	X	X	X	X
20	X	X	X	X	X	X
30	X	X	X	X	X	X
40	X	X	X	X	X	X
50	X	X	X	X	X	X
60	X	X	X	X	X	X
70	X	X	X	X	X	X
80	X	X	X	X	X	X
90	X	X	X	X	X	X
100	X	X	X	X	X	X
110	X	X	X	X	X	X
120	X	X	X	X	X	X
130	X	X	X	X	X	X
140	X	X	X	X	X	X
150	X	X	X	X	X	X
160	X	X	X	X	X	X
170	X	X	X	X	X	X
180	X	X	X	X	X	X
190	X	X	X	X	X	X
200	X	X	X	X	X	X
210	X	X	X	X	X	X
220	X	X	X	X	X	X
230	X	X	X	X	X	X
240	X	X	X	X	X	X
250	X	X	X	X	X	X
260	X	X	X	X	X	X
270	X	X	X	X	X	X
280	X	X	X	X	X	X
290	X	X	X	X	X	X
300	X	X	X	X	X	X
310	X	X	X	X	X	X
320	X	X	X	X	X	X
330	X	X	X	X	X	X
340	X	X	X	X	X	X
350	X	X	X	X	X	X
360	X	X	X	X	X	X
370	X	X	X	X	X	X
380	X	X	X	X	X	X
390	X	X	X	X	X	X
400	X	X	X	X	X	X
410	X	X	X	X	X	X
420	X	X	X	X	X	X
430	X	X	X	X	X	X
440	X	X	X	X	X	X
450	X	X	X	X	X	X
460	X	X	X	X	X	X
470	X	X	X	X	X	X
480	X	X	X	X	X	X
490	X	X	X	X	X	X
500	X	X	X	X	X	X
510	X	X	X	X	X	X
520	X	X	X	X	X	X
530	X	X	X	X	X	X
540	X	X	X	X	X	X
550	X	X	X	X	X	X
560	X	X	X	X	X	X
570	X	X	X	X	X	X
580	X	X	X	X	X	X
590	X	X	X	X	X	X
600	X	X	X	X	X	X
610	X	X	X	X	X	X
620	X	X	X	X	X	X
630	X	X	X	X	X	X
640	X	X	X	X	X	X
650	X	X	X	X	X	X
660	X	X	X	X	X	X
670	X	X	X	X	X	X
680	X	X	X	X	X	X
690	X	X	X	X	X	X
700	X	X	X	X	X	X
710	X	X	X	X	X	X
720	X	X	X	X	X	X
730	X	X	X	X	X	X
740	X	X	X	X	X	X
750	X	X	X	X	X	X
760	X	X	X	X	X	X
770	X	X	X	X	X	X
780	X	X	X	X	X	X
790	X	X	X	X	X	X
800	X	X	X	X	X	X
810	X	X	X	X	X	X
820	X	X	X	X	X	X
830	X	X	X	X	X	X
840	X	X	X	X	X	X
850	X	X	X	X	X	X
860	X	X	X	X	X	X
870	X	X	X	X	X	X
880	X	X	X	X	X	X
890	X	X	X	X	X	X
900	X	X	X	X	X	X
910	X	X	X	X	X	X
920	X	X	X	X	X	X
930	X	X	X	X	X	X
940	X	X	X	X	X	X
950	X	X	X	X	X	X
960	X	X	X	X	X	X
970	X	X	X	X	X	X
980	X	X	X	X	X	X
990	X	X	X	X	X	X
1000	X	X	X	X	X	X

$$(20) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \cup \mathcal{L}(\mathcal{C}) \quad (21)$$

[illegible]

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

	530	540	550	560	570	580
10	...	...	...	...	...	...
20	...	...	...	...	...	...
30	...	...	...	...	...	...
40	...	...	...	...	...	...
50	...	...	...	...	...	...
60	...	...	...	...	...	...
70	...	...	...	...	...	...

(24)

$$(25) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

$$(26) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (27)$$

	110	120	130	140	150	160
80	12	12	12	12	12	12
81	12	12	12	12	12	12
82	12	12	12	12	12	12
83	12	12	12	12	12	12
84	12	12	12	12	12	12
85	12	12	12	12	12	12
86	12	12	12	12	12	12
87	12	12	12	12	12	12
88	12	12	12	12	12	12
89	12	12	12	12	12	12
90	12	12	12	12	12	12
91	12	12	12	12	12	12
92	12	12	12	12	12	12
93	12	12	12	12	12	12
94	12	12	12	12	12	12
95	12	12	12	12	12	12
96	12	12	12	12	12	12
97	12	12	12	12	12	12
98	12	12	12	12	12	12
99	12	12	12	12	12	12
100	12	12	12	12	12	12
101	12	12	12	12	12	12
102	12	12	12	12	12	12
103	12	12	12	12	12	12
104	12	12	12	12	12	12
105	12	12	12	12	12	12
106	12	12	12	12	12	12
107	12	12	12	12	12	12
108	12	12	12	12	12	12
109	12	12	12	12	12	12
110	12	12	12	12	12	12
111	12	12	12	12	12	12
112	12	12	12	12	12	12
113	12	12	12	12	12	12
114	12	12	12	12	12	12
115	12	12	12	12	12	12
116	12	12	12	12	12	12
117	12	12	12	12	12	12
118	12	12	12	12	12	12
119	12	12	12	12	12	12
120	12	12	12	12	12	12
121	12	12	12	12	12	12
122	12	12	12	12	12	12
123	12	12	12	12	12	12
124	12	12	12	12	12	12
125	12	12	12	12	12	12
126	12	12	12	12	12	12
127	12	12	12	12	12	12
128	12	12	12	12	12	12
129	12	12	12	12	12	12
130	12	12	12	12	12	12
131	12	12	12	12	12	12
132	12	12	12	12	12	12
133	12	12	12	12	12	12
134	12	12	12	12	12	12
135	12	12	12	12	12	12
136	12	12	12	12	12	12
137	12	12	12	12	12	12
138	12	12	12	12	12	12
139	12	12	12	12	12	12
140	12	12	12	12	12	12
141	12	12	12	12	12	12
142	12	12	12	12	12	12
143	12	12	12	12	12	12
144	12	12	12	12	12	12
145	12	12	12	12	12	12
146	12	12	12	12	12	12
147	12	12	12	12	12	12
148	12	12	12	12	12	12
149	12	12	12	12	12	12
150	12	12	12	12	12	12
151	12	12	12	12	12	12
152	12	12	12	12	12	12
153	12	12	12	12	12	12
154	12	12	12	12	12	12
155	12	12	12	12	12	12
156	12	12	12	12	12	12
157	12	12	12	12	12	12
158	12	12	12	12	12	12
159	12	12	12	12	12	12
160	12	12	12	12	12	12

	160	170	180	190	200	210
80	...	...	...	...	...	...
90	...	...	...	...	...	...
100	...	...	...	...	...	...
110	...	...	...	...	...	...
120	...	...	...	...	...	...
130	...	...	...	...	...	...
140	...	...	...	...	...	...
150	...	...	...	...	...	...

$$(29) \quad \frac{d}{dt} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$$

[illegible]

	320	330	340	350	360	370
80	...	...	...	...	...	...
90	...	...	...	...	...	...
100	...	...	...	...	...	...
110	...	...	...	...	...	...
120	...	...	...	...	...	...
130	...	...	...	...	...	...
140	...	...	...	...	...	...
150	...	...	...	...	...	...

$$(32) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (33)$$

$$(33) \quad \mathcal{L}(\mathcal{A}) = \mathcal{L}(\mathcal{B}) \quad (34)$$

[illegible]

	530	540	550	560	570	580
80	n	n	n	n	n	n
81	n	n	n	n	n	n
82	n	n	n	n	n	n
83	n	n	n	n	n	n
84	n	n	n	n	n	n
85	n	n	n	n	n	n
86	n	n	n	n	n	n
87	n	n	n	n	n	n
88	n	n	n	n	n	n
89	n	n	n	n	n	n
90	n	n	n	n	n	n
91	n	n	n	n	n	n
92	n	n	n	n	n	n
93	n	n	n	n	n	n
94	n	n	n	n	n	n
95	n	n	n	n	n	n
96	n	n	n	n	n	n
97	n	n	n	n	n	n
98	n	n	n	n	n	n
99	n	n	n	n	n	n
100	n	n	n	n	n	n
101	n	n	n	n	n	n
102	n	n	n	n	n	n
103	n	n	n	n	n	n
104	n	n	n	n	n	n
105	n	n	n	n	n	n
106	n	n	n	n	n	n
107	n	n	n	n	n	n
108	n	n	n	n	n	n
109	n	n	n	n	n	n
110	n	n	n	n	n	n
111	n	n	n	n	n	n
112	n	n	n	n	n	n
113	n	n	n	n	n	n
114	n	n	n	n	n	n
115	n	n	n	n	n	n
116	n	n	n	n	n	n
117	n	n	n	n	n	n
118	n	n	n	n	n	n
119	n	n	n	n	n	n
120	n	n	n	n	n	n
121	n	n	n	n	n	n
122	n	n	n	n	n	n
123	n	n	n	n	n	n
124	n	n	n	n	n	n
125	n	n	n	n	n	n
126	n	n	n	n	n	n
127	n	n	n	n	n	n
128	n	n	n	n	n	n
129	n	n	n	n	n	n
130	n	n	n	n	n	n
131	n	n	n	n	n	n
132	n	n	n	n	n	n
133	n	n	n	n	n	n
134	n	n	n	n	n	n
135	n	n	n	n	n	n
136	n	n	n	n	n	n
137	n	n	n	n	n	n
138	n	n	n	n	n	n
139	n	n	n	n	n	n
140	n	n	n	n	n	n
141	n	n	n	n	n	n
142	n	n	n	n	n	n
143	n	n	n	n	n	n
144	n	n	n	n	n	n
145	n	n	n	n	n	n
146	n	n	n	n	n	n
147	n	n	n	n	n	n
148	n	n	n	n	n	n
149	n	n	n	n	n	n
150	n	n	n	n	n	n
151	n	n	n	n	n	n
152	n	n	n	n	n	n
153	n	n	n	n	n	n
154	n	n	n	n	n	n
155	n	n	n	n	n	n
156	n	n	n	n	n	n
157	n	n	n	n	n	n
158	n	n	n	n	n	n
159	n	n	n	n	n	n
160	n	n	n	n	n	n
161	n	n	n	n	n	n
162	n	n	n	n	n	n
163	n	n	n	n	n	n
164	n	n	n	n	n	n
165	n	n	n	n	n	n
166	n	n	n	n	n	n
167	n	n	n	n	n	n
168	n	n	n	n	n	n
169	n	n	n	n	n	n
170	n	n	n	n	n	n
171	n	n	n	n	n	n
172	n	n	n	n	n	n
173	n	n	n	n	n	n
174	n	n	n	n	n	n
175	n	n	n	n	n	n
176	n	n	n	n	n	n
177	n	n	n	n	n	n
178	n	n	n	n	n	n
179	n	n	n	n	n	n
180	n	n	n	n	n	n
181	n	n	n	n	n	n
182	n	n	n	n	n	n
183	n	n	n	n	n	n
184	n	n	n	n	n	n
185	n	n	n	n	n	n
186	n	n	n	n	n	n
187	n	n	n	n	n	n
188	n	n	n	n	n	n
189	n	n	n	n	n	n
190	n	n	n	n	n	n
191	n	n	n	n	n	n
192	n	n	n	n	n	n
193	n	n	n	n	n	n
194	n	n	n	n	n	n
195	n	n	n	n	n	n
196	n	n	n	n	n	n
197	n	n	n	n	n	n
198	n	n	n	n	n	n
199	n	n	n	n	n	n
200	n	n	n	n	n	n

(36)

	10	20	30	40	50
150	9	9	9	9	9
160	6	6	6	6	6
170	9	9	9	9	9
180	6	6	6	6	6
190	9	9	9	9	9
200	6	6	6	6	6
210	9	9	9	9	9
220	6	6	6	6	6
230	9	9	9	9	9
240	6	6	6	6	6
250	9	9	9	9	9
260	6	6	6	6	6
270	9	9	9	9	9
280	6	6	6	6	6
290	9	9	9	9	9
300	6	6	6	6	6
310	9	9	9	9	9
320	6	6	6	6	6
330	9	9	9	9	9
340	6	6	6	6	6
350	9	9	9	9	9
360	6	6	6	6	6
370	9	9	9	9	9
380	6	6	6	6	6
390	9	9	9	9	9
400	6	6	6	6	6
410	9	9	9	9	9
420	6	6	6	6	6
430	9	9	9	9	9
440	6	6	6	6	6
450	9	9	9	9	9
460	6	6	6	6	6
470	9	9	9	9	9
480	6	6	6	6	6
490	9	9	9	9	9
500	6	6	6	6	6
510	9	9	9	9	9
520	6	6	6	6	6
530	9	9	9	9	9
540	6	6	6	6	6
550	9	9	9	9	9
560	6	6	6	6	6
570	9	9	9	9	9
580	6	6	6	6	6
590	9	9	9	9	9
600	6	6	6	6	6
610	9	9	9	9	9
620	6	6	6	6	6
630	9	9	9	9	9
640	6	6	6	6	6
650	9	9	9	9	9
660	6	6	6	6	6
670	9	9	9	9	9
680	6	6	6	6	6
690	9	9	9	9	9
700	6	6	6	6	6
710	9	9	9	9	9
720	6	6	6	6	6
730	9	9	9	9	9
740	6	6	6	6	6
750	9	9	9	9	9
760	6	6	6	6	6
770	9	9	9	9	9
780	6	6	6	6	6
790	9	9	9	9	9
800	6	6	6	6	6
810	9	9	9	9	9
820	6	6	6	6	6
830	9	9	9	9	9
840	6	6	6	6	6
850	9	9	9	9	9
860	6	6	6	6	6
870	9	9	9	9	9
880	6	6	6	6	6
890	9	9	9	9	9
900	6	6	6	6	6
910	9	9	9	9	9
920	6	6	6	6	6
930	9	9	9	9	9
940	6	6	6	6	6
950	9	9	9	9	9
960	6	6	6	6	6
970	9	9	9	9	9
980	6	6	6	6	6
990	9	9	9	9	9
1000	6	6	6	6	6

	60	70	80	90	100
150					
160					
170					
180					
190					
200					
210					
220					

	110	120	130	140	150	160
150	2	2	2	2	2	2
160	2	2	2	2	2	2
170	2	2	2	2	2	2
180	2	2	2	2	2	2
190	2	2	2	2	2	2
200	2	2	2	2	2	2
210	2	2	2	2	2	2
220	2	2	2	2	2	2
230	2	2	2	2	2	2
240	2	2	2	2	2	2
250	2	2	2	2	2	2
260	2	2	2	2	2	2
270	2	2	2	2	2	2
280	2	2	2	2	2	2
290	2	2	2	2	2	2
300	2	2	2	2	2	2
310	2	2	2	2	2	2
320	2	2	2	2	2	2
330	2	2	2	2	2	2
340	2	2	2	2	2	2
350	2	2	2	2	2	2
360	2	2	2	2	2	2
370	2	2	2	2	2	2
380	2	2	2	2	2	2
390	2	2	2	2	2	2
400	2	2	2	2	2	2
410	2	2	2	2	2	2
420	2	2	2	2	2	2
430	2	2	2	2	2	2
440	2	2	2	2	2	2
450	2	2	2	2	2	2
460	2	2	2	2	2	2
470	2	2	2	2	2	2
480	2	2	2	2	2	2
490	2	2	2	2	2	2
500	2	2	2	2	2	2
510	2	2	2	2	2	2
520	2	2	2	2	2	2
530	2	2	2	2	2	2
540	2	2	2	2	2	2
550	2	2	2	2	2	2
560	2	2	2	2	2	2
570	2	2	2	2	2	2
580	2	2	2	2	2	2
590	2	2	2	2	2	2
600	2	2	2	2	2	2
610	2	2	2	2	2	2
620	2	2	2	2	2	2
630	2	2	2	2	2	2
640	2	2	2	2	2	2
650	2	2	2	2	2	2
660	2	2	2	2	2	2
670	2	2	2	2	2	2
680	2	2	2	2	2	2
690	2	2	2	2	2	2
700	2	2	2	2	2	2
710	2	2	2	2	2	2
720	2	2	2	2	2	2
730	2	2	2	2	2	2
740	2	2	2	2	2	2
750	2	2	2	2	2	2
760	2	2	2	2	2	2
770	2	2	2	2	2	2
780	2	2	2	2	2	2
790	2	2	2	2	2	2
800	2	2	2	2	2	2
810	2	2	2	2	2	2
820	2	2	2	2	2	2
830	2	2	2	2	2	2
840	2	2	2	2	2	2
850	2	2	2	2	2	2
860	2	2	2	2	2	2
870	2	2	2	2	2	2
880	2	2	2	2	2	2
890	2	2	2	2	2	2
900	2	2	2	2	2	2
910	2	2	2	2	2	2
920	2	2	2	2	2	2
930	2	2	2	2	2	2
940	2	2	2	2	2	2
950	2	2	2	2	2	2
960	2	2	2	2	2	2
970	2	2	2	2	2	2
980	2	2	2	2	2	2
990	2	2	2	2	2	2
1000	2	2	2	2	2	2

[illegible]

$$(41) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

	270	280	290	300	310	320
150	u	u	u	u	u	u
160	u	u	u	u	u	u
170	u	u	u	u	u	u
180	u	u	u	u	u	u
190	u	u	u	u	u	u
200	u	u	u	u	u	u
210	u	u	u	u	u	u
220	u	u	u	u	u	u
230	u	u	u	u	u	u
240	u	u	u	u	u	u
250	u	u	u	u	u	u
260	u	u	u	u	u	u
270	u	u	u	u	u	u
280	u	u	u	u	u	u
290	u	u	u	u	u	u
300	u	u	u	u	u	u
310	u	u	u	u	u	u
320	u	u	u	u	u	u
330	u	u	u	u	u	u
340	u	u	u	u	u	u
350	u	u	u	u	u	u
360	u	u	u	u	u	u
370	u	u	u	u	u	u
380	u	u	u	u	u	u
390	u	u	u	u	u	u
400	u	u	u	u	u	u
410	u	u	u	u	u	u
420	u	u	u	u	u	u
430	u	u	u	u	u	u
440	u	u	u	u	u	u
450	u	u	u	u	u	u
460	u	u	u	u	u	u
470	u	u	u	u	u	u
480	u	u	u	u	u	u
490	u	u	u	u	u	u
500	u	u	u	u	u	u
510	u	u	u	u	u	u
520	u	u	u	u	u	u
530	u	u	u	u	u	u
540	u	u	u	u	u	u
550	u	u	u	u	u	u
560	u	u	u	u	u	u
570	u	u	u	u	u	u
580	u	u	u	u	u	u
590	u	u	u	u	u	u
600	u	u	u	u	u	u
610	u	u	u	u	u	u
620	u	u	u	u	u	u
630	u	u	u	u	u	u
640	u	u	u	u	u	u
650	u	u	u	u	u	u
660	u	u	u	u	u	u
670	u	u	u	u	u	u
680	u	u	u	u	u	u
690	u	u	u	u	u	u
700	u	u	u	u	u	u
710	u	u	u	u	u	u
720	u	u	u	u	u	u
730	u	u	u	u	u	u
740	u	u	u	u	u	u
750	u	u	u	u	u	u
760	u	u	u	u	u	u
770	u	u	u	u	u	u
780	u	u	u	u	u	u
790	u	u	u	u	u	u
800	u	u	u	u	u	u
810	u	u	u	u	u	u
820	u	u	u	u	u	u
830	u	u	u	u	u	u
840	u	u	u	u	u	u
850	u	u	u	u	u	u
860	u	u	u	u	u	u
870	u	u	u	u	u	u
880	u	u	u	u	u	u
890	u	u	u	u	u	u
900	u	u	u	u	u	u
910	u	u	u	u	u	u
920	u	u	u	u	u	u
930	u	u	u	u	u	u
940	u	u	u	u	u	u
950	u	u	u	u	u	u
960	u	u	u	u	u	u
970	u	u	u	u	u	u
980	u	u	u	u	u	u
990	u	u	u	u	u	u
1000	u	u	u	u	u	u

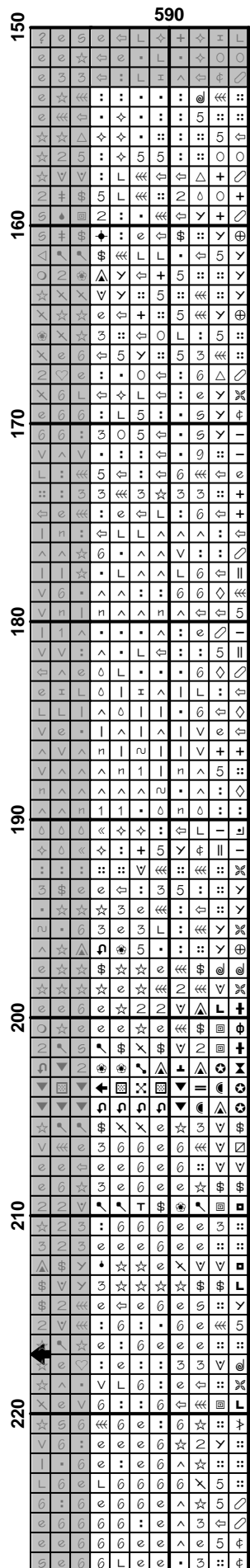
$$(43) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} \left( \sum_{k=0}^\infty \frac{(t-s)^k}{k!} f^{(k)}(s) \right) ds$$

	380	390	400	410	420
150	u	u	u	u	u
160	u	u	u	u	u
170	u	u	u	u	u
180	u	u	u	u	u
190	u	u	u	u	u
200	u	u	u	u	u
210	u	u	u	u	u
220	u	u	u	u	u
230	u	u	u	u	u
240	u	u	u	u	u
250	u	u	u	u	u
260	u	u	u	u	u
270	u	u	u	u	u
280	u	u	u	u	u
290	u	u	u	u	u
300	u	u	u	u	u
310	u	u	u	u	u
320	u	u	u	u	u
330	u	u	u	u	u
340	u	u	u	u	u
350	u	u	u	u	u
360	u	u	u	u	u
370	u	u	u	u	u
380	u	u	u	u	u
390	u	u	u	u	u
400	u	u	u	u	u
410	u	u	u	u	u
420	u	u	u	u	u
430	u	u	u	u	u
440	u	u	u	u	u
450	u	u	u	u	u
460	u	u	u	u	u
470	u	u	u	u	u
480	u	u	u	u	u
490	u	u	u	u	u
500	u	u	u	u	u
510	u	u	u	u	u
520	u	u	u	u	u
530	u	u	u	u	u
540	u	u	u	u	u
550	u	u	u	u	u
560	u	u	u	u	u
570	u	u	u	u	u
580	u	u	u	u	u
590	u	u	u	u	u
600	u	u	u	u	u
610	u	u	u	u	u
620	u	u	u	u	u
630	u	u	u	u	u
640	u	u	u	u	u
650	u	u	u	u	u
660	u	u	u	u	u
670	u	u	u	u	u
680	u	u	u	u	u
690	u	u	u	u	u
700	u	u	u	u	u
710	u	u	u	u	u
720	u	u	u	u	u
730	u	u	u	u	u
740	u	u	u	u	u
750	u	u	u	u	u
760	u	u	u	u	u
770	u	u	u	u	u
780	u	u	u	u	u
790	u	u	u	u	u
800	u	u	u	u	u
810	u	u	u	u	u
820	u	u	u	u	u
830	u	u	u	u	u
840	u	u	u	u	u
850	u	u	u	u	u
860	u	u	u	u	u
870	u	u	u	u	u
880	u	u	u	u	u
890	u	u	u	u	u
900	u	u	u	u	u
910	u	u	u	u	u
920	u	u	u	u	u
930	u	u	u	u	u
940	u	u	u	u	u
950	u	u	u	u	u
960	u	u	u	u	u
970	u	u	u	u	u
980	u	u	u	u	u
990	u	u	u	u	u
1000	u	u	u	u	u

$$(45) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \mathcal{I}_\alpha f(t), \quad t \in [0, T],$$

	480	490	500	510	520	530
150						
160						
170						
180						
190						
200						
210						
220						

150	530	540	550	560	570	580
160						
170						
180						
190						
200						
210						
220						



	10										20										30										40										50									
230	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
240	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
250	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																				

	60	70	80	90	100
230	...	...	...	...	...
240	...	...	...	...	...
250	...	...	...	...	...
260	...	...	...	...	...
270	...	...	...	...	...
280	...	...	...	...	...
290	...	...	...	...	...
300	...	...	...	...	...

$$(51) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

	160	170	180	190	200	210
230	e	*	*	*	*	*
231	9	*	*	*	*	*
232	?	*	*	*	*	*
233	6	*	*	*	*	*
234	9	*	*	*	*	*
235	6	*	*	*	*	*
236	6	*	*	*	*	*
237	6	*	*	*	*	*
238	6	*	*	*	*	*
239	6	*	*	*	*	*
240	6	*	*	*	*	*
241	6	*	*	*	*	*
242	6	*	*	*	*	*
243	6	*	*	*	*	*
244	6	*	*	*	*	*
245	6	*	*	*	*	*
246	6	*	*	*	*	*
247	6	*	*	*	*	*
248	6	*	*	*	*	*
249	6	*	*	*	*	*
250	6	*	*	*	*	*
251	6	*	*	*	*	*
252	6	*	*	*	*	*
253	6	*	*	*	*	*
254	6	*	*	*	*	*
255	6	*	*	*	*	*
256	6	*	*	*	*	*
257	6	*	*	*	*	*
258	6	*	*	*	*	*
259	6	*	*	*	*	*
260	6	*	*	*	*	*
261	6	*	*	*	*	*
262	6	*	*	*	*	*
263	6	*	*	*	*	*
264	6	*	*	*	*	*
265	6	*	*	*	*	*
266	6	*	*	*	*	*
267	6	*	*	*	*	*
268	6	*	*	*	*	*
269	6	*	*	*	*	*
270	6	*	*	*	*	*
271	6	*	*	*	*	*
272	6	*	*	*	*	*
273	6	*	*	*	*	*
274	6	*	*	*	*	*
275	6	*	*	*	*	*
276	6	*	*	*	*	*
277	6	*	*	*	*	*
278	6	*	*	*	*	*
279	6	*	*	*	*	*
280	6	*	*	*	*	*
281	6	*	*	*	*	*
282	6	*	*	*	*	*
283	6	*	*	*	*	*
284	6	*	*	*	*	*
285	6	*	*	*	*	*
286	6	*	*	*	*	*
287	6	*	*	*	*	*
288	6	*	*	*	*	*
289	6	*	*	*	*	*
290	6	*	*	*	*	*
291	6	*	*	*	*	*
292	6	*	*	*	*	*
293	6	*	*	*	*	*
294	6	*	*	*	*	*
295	6	*	*	*	*	*
296	6	*	*	*	*	*
297	6	*	*	*	*	*
298	6	*	*	*	*	*
299	6	*	*	*	*	*
300	6	*	*	*	*	*

$$(53) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds + \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

	270	280	290	300	310	320
230	V	V	V	V	V	V
240	V	V	V	V	V	V
250	V	V	V	V	V	V
260	V	V	V	V	V	V
270	V	V	V	V	V	V
280	V	V	V	V	V	V
290	V	V	V	V	V	V
300	V	V	V	V	V	V
310	V	V	V	V	V	V
320	V	V	V	V	V	V

$$(55) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \mathcal{I}_\alpha f(t), \quad t \in [0, T],$$

[illegible]

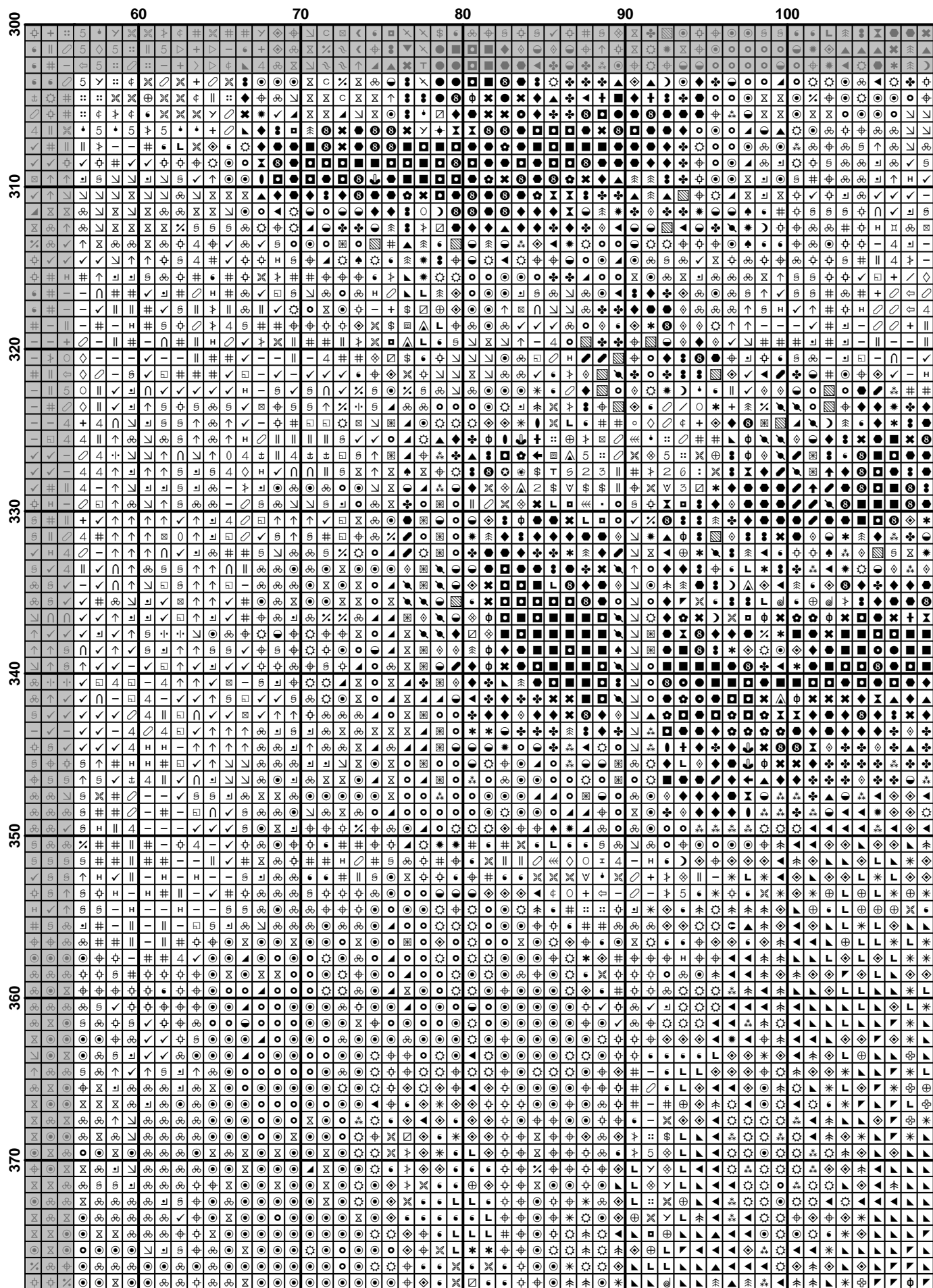
[illegible]

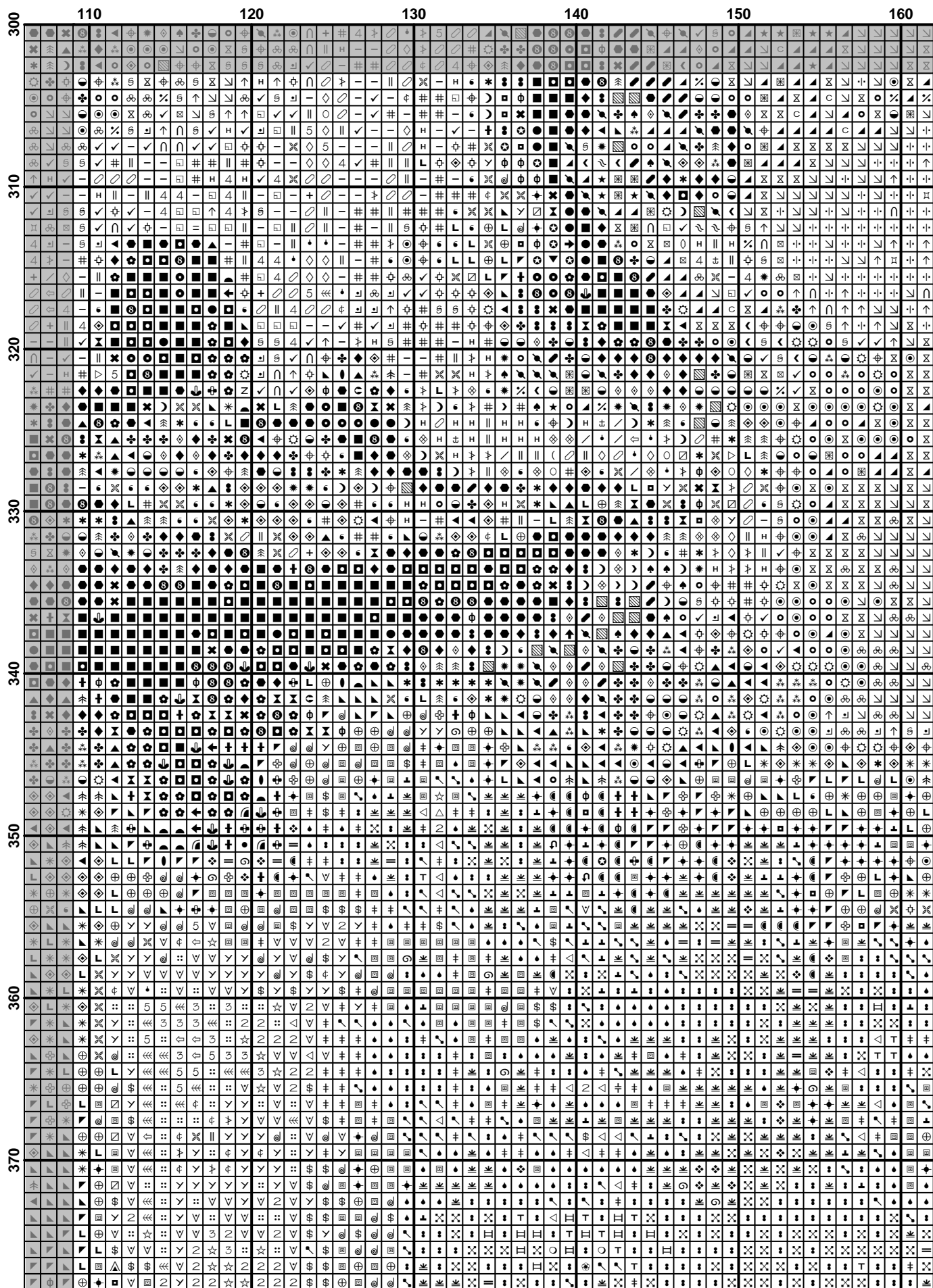
$$(58) \quad \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds = \frac{1}{\Gamma(\alpha)} \int_0^t (t-s)^{\alpha-1} f(s) ds$$

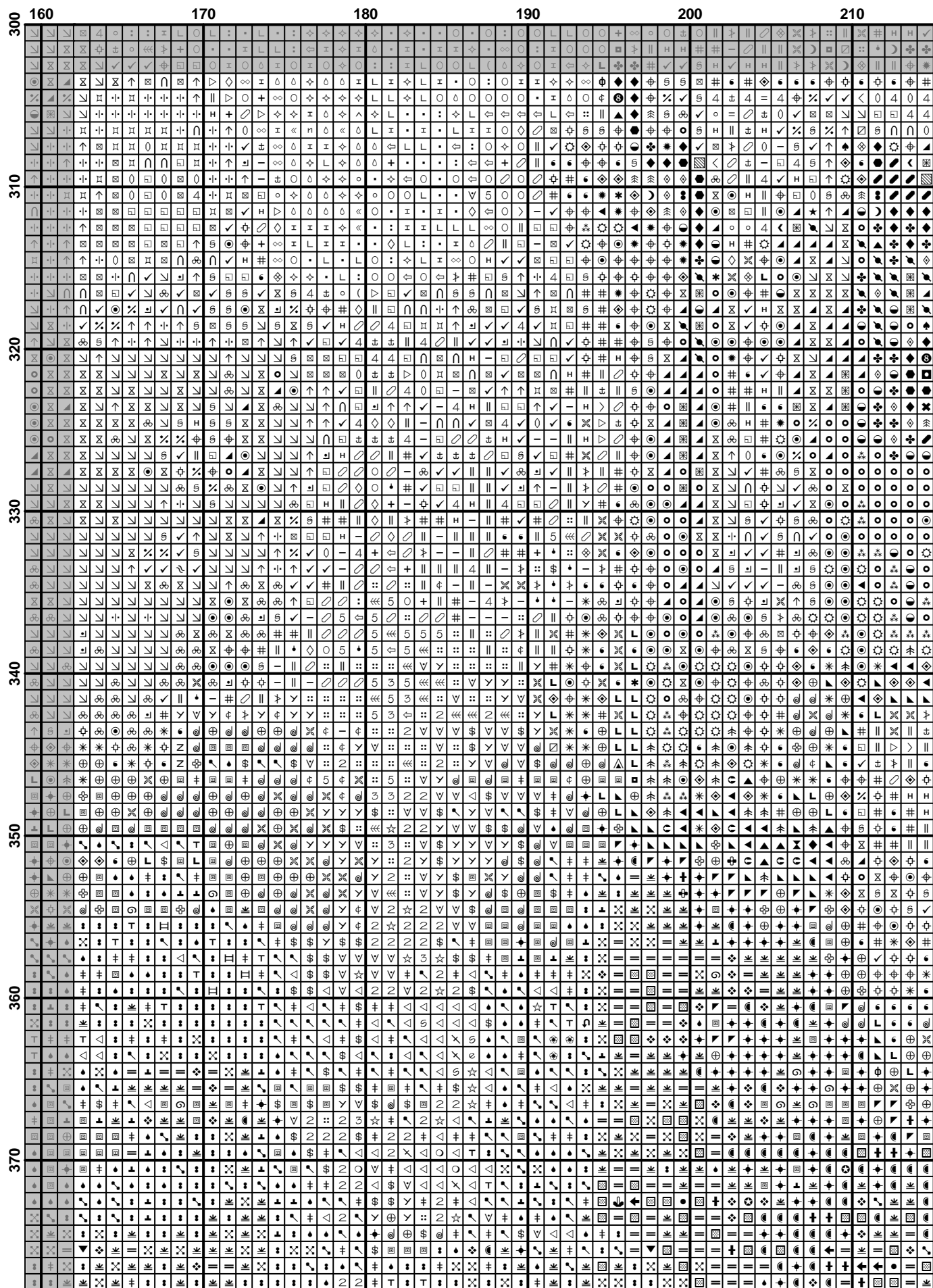
[illegible]

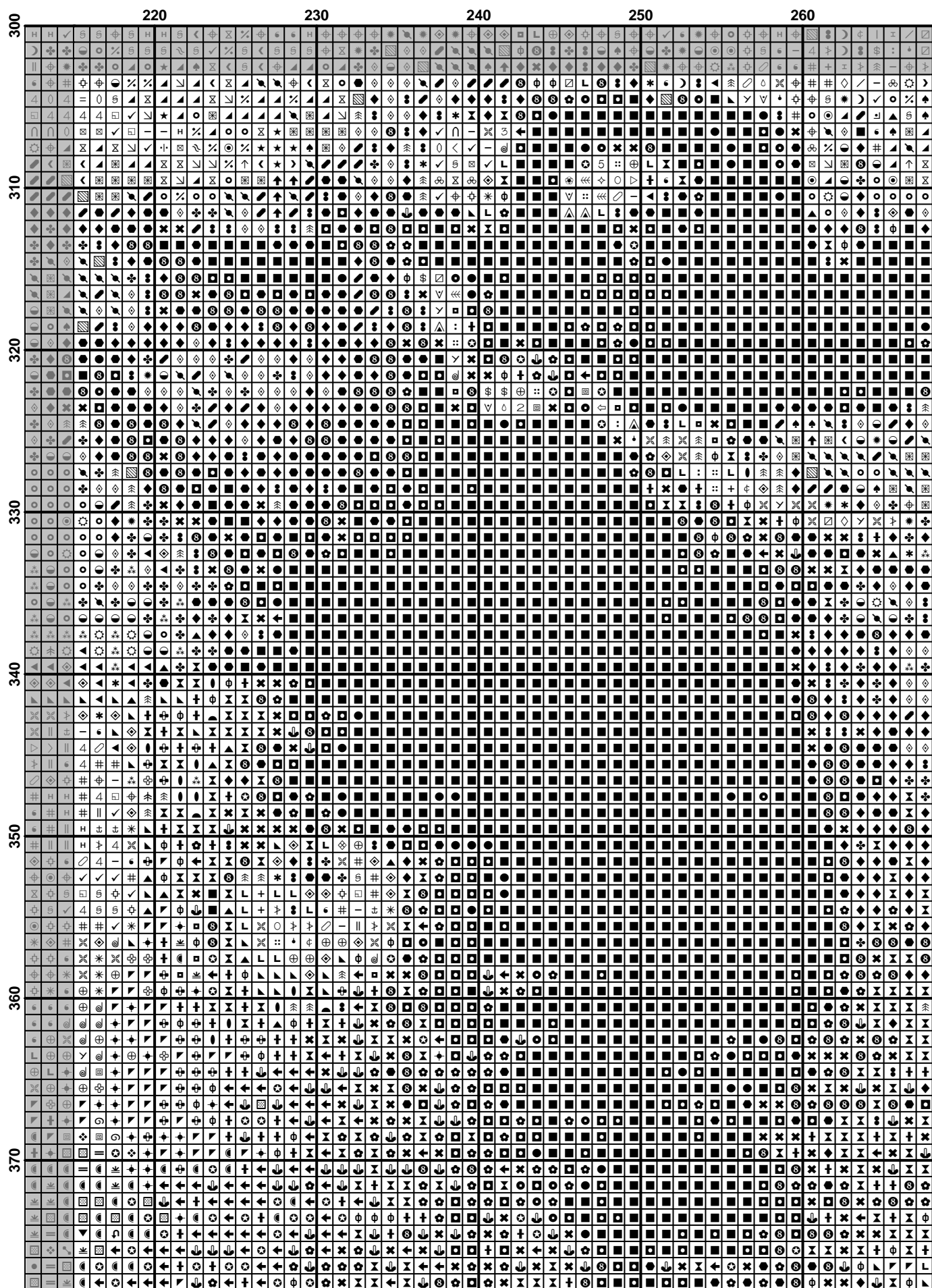
										590
230	e	6	6	6	6	:	e	^	3	7
	e	6	6	6	6	e	e	^	e	5
	6	6	6	L	e	e	*	3	::	+
	e	6	6	6	e	e	6	☆	::	✕
	9	6	6	6	e	e	L	3	::	Y
	e	6	6	V	•	6	☆	6	3	e
	e	6	6	6	6	e	6	e	3	2
	6	6	V	6	6	e	e	e	e	•
	e	6	6	6	6	6	6	5	☆	3
	e	5	6	6	6	e	e	6	☆	e
240	☆	e	6	6	e	6	e	e	e	e
	☆	e	6	6	e	e	e	e	6	3
	e	☆	e	6	6	e	6	e	6	e
	e	e	6	6	:	6	6	^	☆	6
	e	e	6	6	:	6	6	e	☆	☆
	e	e	:	6	V	:	e	:	e	☆
	e	e	6	e	•	e	e	6	e	£
	3	e	:	6	L	6	L	:	e	2
	e	7	e	☆	e	L	6	e	:	☆
	3	e	☆	2	e	:	e	3	:	3
250	3	e	3	☆	e	e	:	e	£	:
	e	e	e	e	e	L	e	3	↑	e
	6	e	6	e	e	L	e	:	:	↑
	e	3	☆	☆	☆	e	☆	7	3	✓
	e	6	☆	☆	☆	e	☆	7	3	✓
	e	e	6	☆	☆	e	6	↑	↑	£
	e	☆	6	☆	e	•	↑	3	↑	↑
	6	e	e	e	6	•	e	5	5	£
	e	☆	e	e	6	•	3	£	↑	:
	e	☆	e	e	:	6	e	:	5	7
260	e	e	e	e	7	:	£	△	:	e
	e	5	:	☆	6	L	6	3	↑	:
	e	☆	e	3	6	L	6	3	5	:
	e	☆	☆	e	V	6	£	↑	7	5
	6	☆	☆	e	6	6	L	☆	:	5
	e	☆	☆	e	6	6	3	↑	:	5
	e	☆	☆	6	V	7	7	☆	e	↑
	e	☆	e	e	V	V	☆	↑	:	↑
	e	e	e	6	V	V	e	☆	:	5
	e	☆	e	6	6	V	e	£	:	£
270	e	e	6	e	6	6	:	☆	:	5
	e	e	6	e	6	L	e	2	7	↑
	5	e	6	6	6	7	e	2	7	5
	☆	☆	e	6	6	6	☆	✓	5	5
	☆	☆	☆	e	e	•	☆	£	3	↑
	☆	☆	☆	e	e	3	e	2	2	£
	☆	☆	☆	e	e	3	e	☆	✕	↑
	☆	☆	☆	3	3	3	6	☆	☆	↑
	☆	☆	☆	3	3	e	☆	☆	3	↑
	☆	☆	6	3	e	:	3	3	:	↑
280	3	5	☆	e	e	6	£	3	7	↑
	☆	e	☆	e	e	6	e	☆	£	3
	6	e	e	6	e	6	L	e	☆	7
	6	6	6	6	6	V	3	☆	:	↑
	5	6	e	6	e	6	e	☆	L	↑
	e	e	e	6	6	V	e	☆	:	↑
	☆	e	5	e	6	6	e	✓	3	5
	☆	e	5	e	6	e	:	☆	£	5
	3	☆	5	e	6	^	☆	✓	3	5
	6	6	e	e	6	□	5	5	◇	5
290	2	5	✕	☆	6	:	e	:	5	∅
	+	☆	6	e	6	3	5	•	:	Y
	✓	✕	5	☆	☆	✓	✓	Y	:	Y
	△	✕	☆	2	e	☆	3	✓	:	Y
	2	2	✕	£	£	£	£	£	£	£
	☆	2	✕	2	☆	☆	3	2	☆	✓
	☆	2	✕	2	☆	☆	☆	2	✓	✓
	☆	2	2	2	2	2	£	£	Y	Y
	↑	e	:	e	3	£	£	£	£	£
	↑	6	3	e	3	:	Y	Y	Y	⊕
300	5	:	:	:	:	5	:	£	•	Y
	∅	•	—	≡	≡	•	3	5	✓	£
	—	≡	✓	H	≡	≡	£	e	£	:
	∅	—	H	≡	≡	:	5	e	3	£
	∅	4	∅	≡	✓	4	∅	:	5	:
	≡	4	∅	≡	—	—	4	∅	:	:

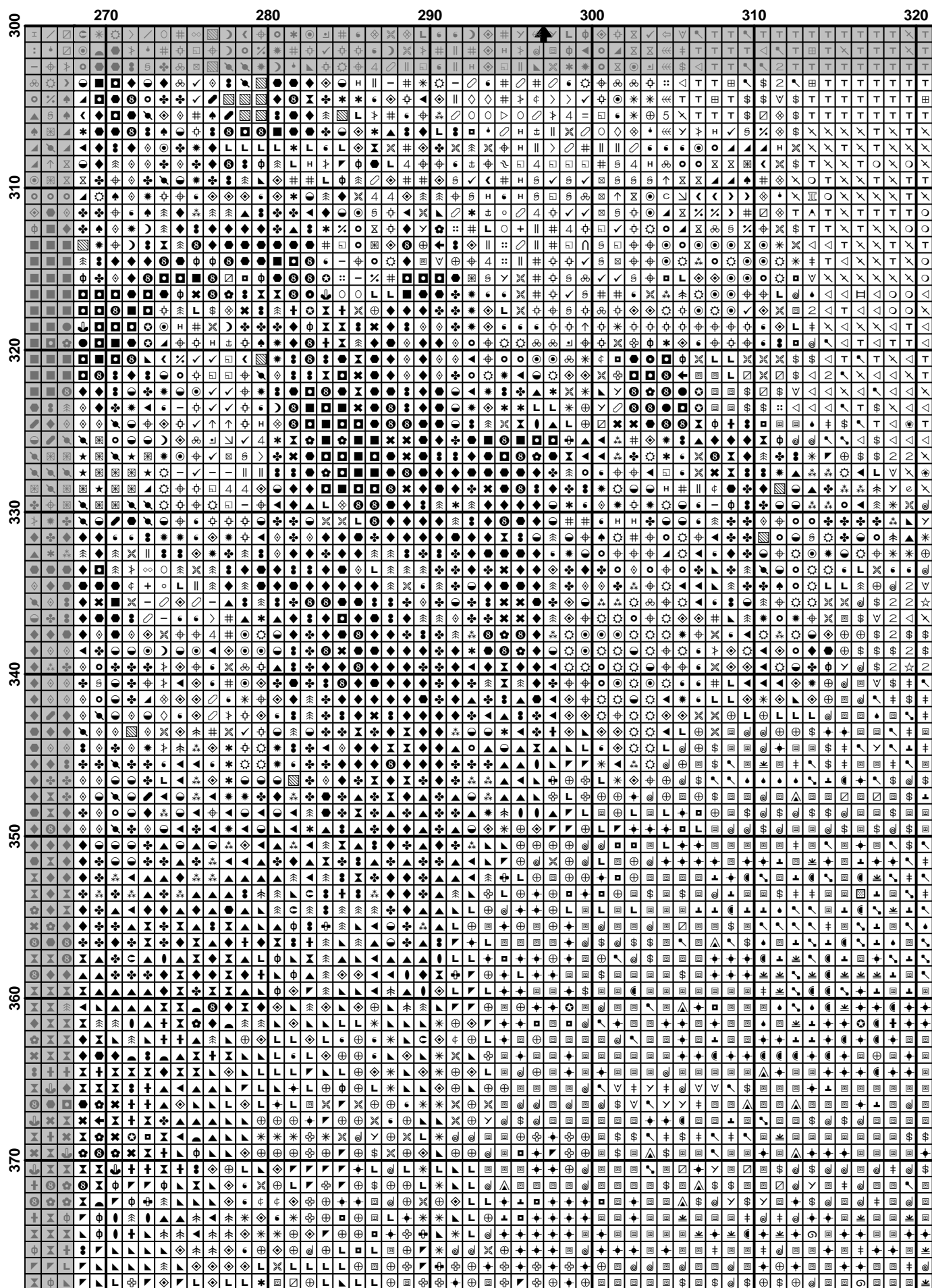
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300	...	...	...	...	...
310	...	...	...	...	...
320	...	...	...	...	...
330	...	...	...	...	...
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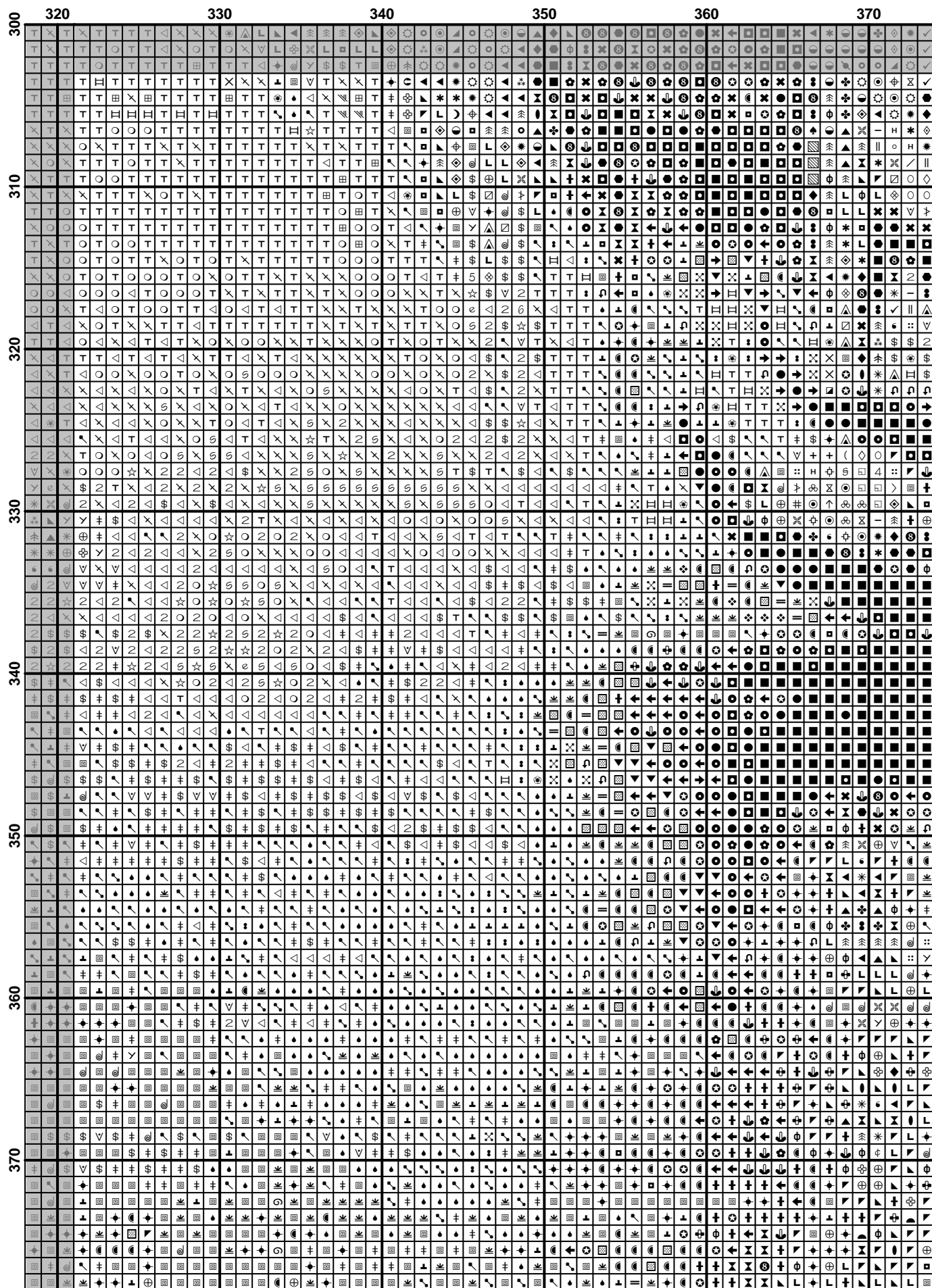




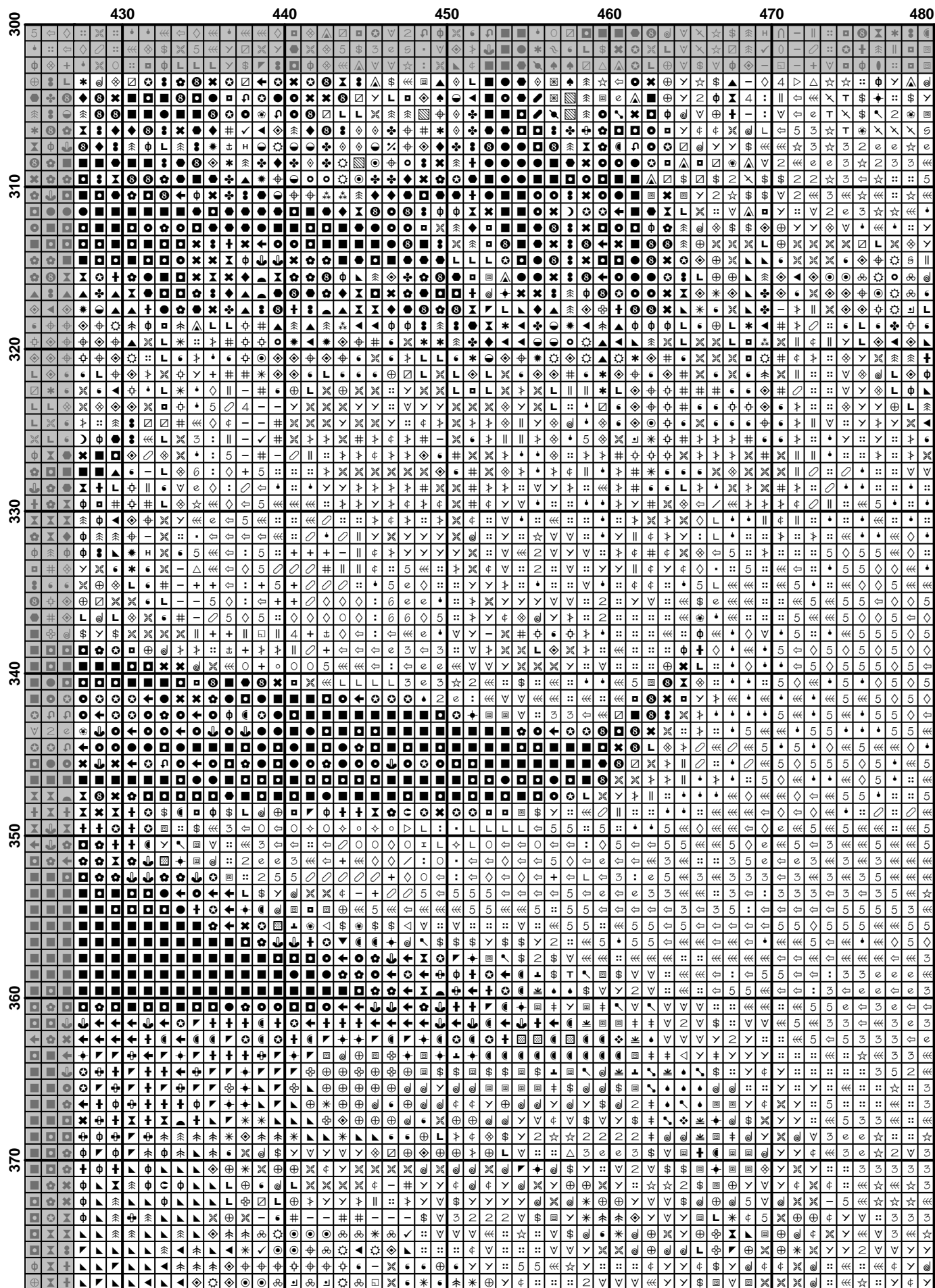




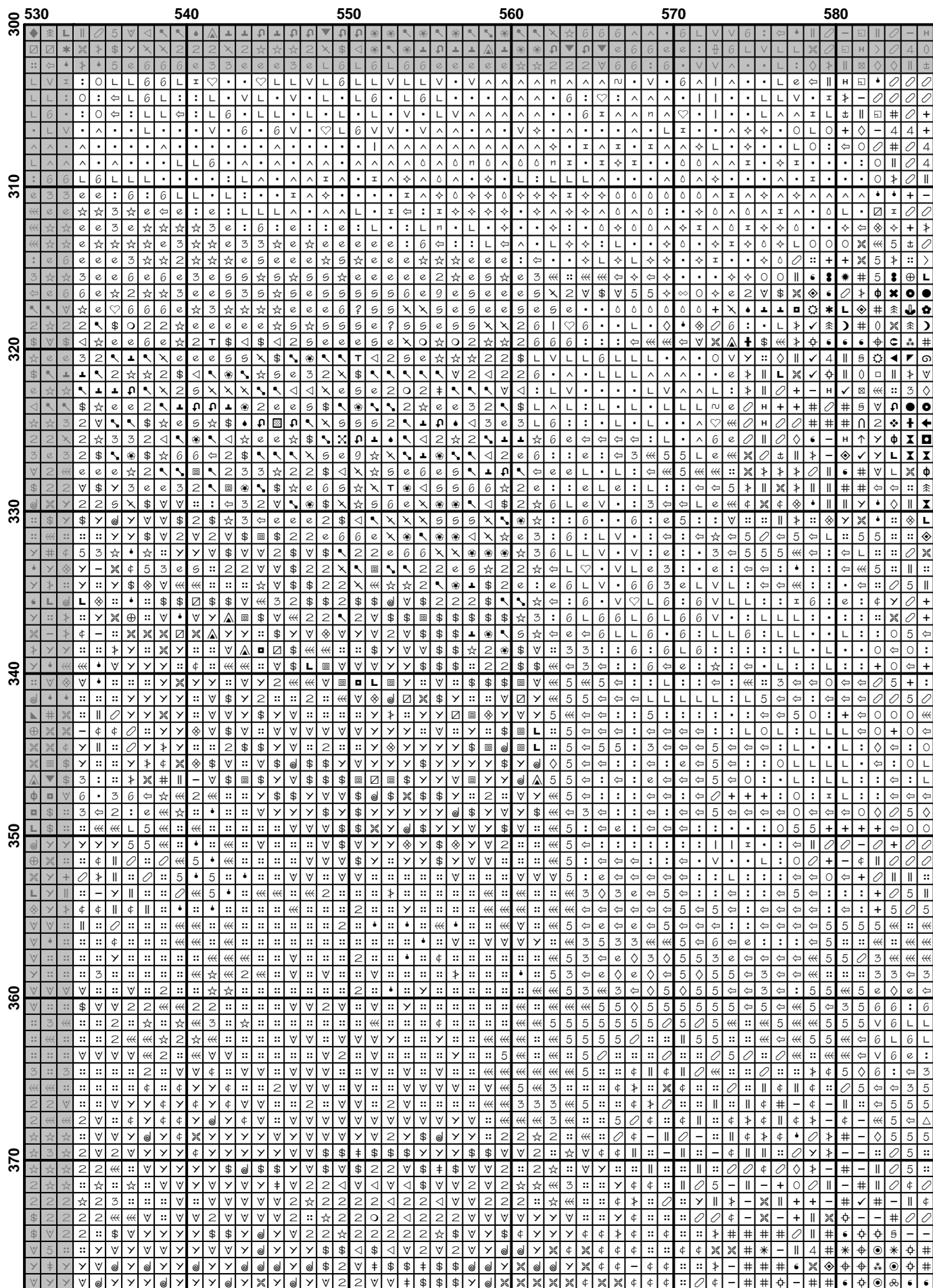








[illegible]



(72)

