

# Heaven and Earth Designs

## Fire

Chart No: HAEJEB 2252

Chart Design by Michele Sayetta

Artwork by Jonathon Earl Bowser



Finished Design Size 450 W by 675 H (18 WX 27 inches on 25ct)  
(This Chart Contains 50 Colors)

Heaven and Earth Designs LLC

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320-214-7998

[www.heavenandearthdesigns.com](http://www.heavenandearthdesigns.com)

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## *Instructions*

Congratulations on buying a **Heaven and Earth Designs LLC** Cross Stitch Chart . We hope it will bring you many hours of pleasurable stitching and believe the final result will be something to love and admire forever.

Included with your chart is a clear plastic bag to protect your chart, and a coded thread list for the threads you will need to complete your project. Our charts are designed to use DMC stranded cotton threads and, where appropriate, Kreinik metallic thread.

### **Chart Instructions:**

1. This chart is made up of several numbered pages beginning at the top left corner of the first page. The pages of chart are laid out from left to right in rows e.g. 1 2 3 4, 5 6 7 8. Although each chart is marked with arrows which indicate the centre , we believe you will find it easier to begin from the top left corner of page 1 and follow the chart page by page to the bottom right corner of the last page.
2. We recommend you stitch your design on either 18 count Aida or 25 count Linen. using 2 strands of cotton over one in each case.
3. At the top of the thread list you will find our recommendation for the fabric colour. We recommend purchasing a piece of fabric that equates to the design size plus 3 inches [75mm] all around, to allow for framing and matting.
4. Because of the large number of stitches, we have found it to be easier if you stitch one 10X10 grid at a time and then continue on to the next 10 x 10 grid.
5. Stitch each page until it is completed and then move on to the next. On each page there is a number at the top left that indicates the page number. On each corner is a number in parenthesis that indicates the connecting page, unless there is not one.
6. Under International Copyright Laws, you may copy the chart for your own use. We recommend that you use a copy as your working document. You may also wish to enlarge the pages to make the symbols easier to read.

**If you have any questions regarding this chart please feel free to contact us.**

*Heaven and Earth Designs LLC*

































*320-214-7998*



















*Http://www.heavenandearthdesigns.com*

Copyright Jonathon Earl Bowser 2011

**Pattern Name:** Fire-Bowser  
**Designed By:** Michele Sayetta  
**Company:** Heaven and Earth Designs LLC  
**Copyright:** 2011 ®  
**Fabric:** Linen 25, White  
 450w X 675h Stitches  
**Size:** 25 Count, 18w X 27h in

### Floss Used for Full Stitches:





































| Symbol   | Strands | Type | Number | Color               |
|--|---------|------|--------|---------------------|
|  ♠     | 2       | DMC  | 152    | Shell Pink-MD LT    |
|  >     | 2       | DMC  | 154    | Grape-VY DK         |
|  2     | 2       | DMC  | 221    | Shell Pink-VY DK    |
|  /     | 2       | DMC  | 223    | Shell Pink-LT       |
|  ♦     | 2       | DMC  | 310    | Black               |
|  5     | 2       | DMC  | 315    | Antique Mauve-VY DK |
|  3     | 2       | DMC  | 316    | Antique Mauve-MD    |
|  III   | 2       | DMC  | 327    | Violet-VY DK        |
|  \$   | 2       | DMC  | 352    | Coral-LT            |
|  #   | 2       | DMC  | 353    | Peach               |
|  ∟   | 2       | DMC  | 356    | Terra Cotta-MD      |
|  □   | 2       | DMC  | 402    | Mahogany-VY LT      |
|  <   | 2       | DMC  | 550    | Violet-VY DK        |
|  6   | 2       | DMC  | 745    | Yellow-LT Pale      |
|  @   | 2       | DMC  | 754    | Peach-LT            |
|  ⚙   | 2       | DMC  | 760    | Salmon              |
|  7   | 2       | DMC  | 902    | Garnet-VY DK        |
|  ∙ ∙ | 2       | DMC  | 915    | Plum-DK             |
|  ~   | 2       | DMC  | 917    | Plum-MD             |
|  ♣   | 2       | DMC  | 939    | Navy Blue-VY DK     |
|  ⊕   | 2       | DMC  | 945    | Tawny               |
|  √   | 2       | DMC  | 967    | Apricot-VY LT       |
|  ∞   | 2       | DMC  | 3078   | Golden Yellow-VY LT |
|  ≡   | 2       | DMC  | 3341   | Apricot             |
|  )   | 2       | DMC  | 3350   | Dusty Rose-UL DK    |
|  «   | 2       | DMC  | 3354   | Dusty Rose-LT       |
|  ✱   | 2       | DMC  | 3371   | Black Brown         |
|  ☼   | 2       | DMC  | 3685   | Mauve-DK            |
|  ∞   | 2       | DMC  | 3687   | Mauve               |
|  *   | 2       | DMC  | 3688   | Mauve-MD            |
|  ≡   | 2       | DMC  | 3712   | Salmon-MD           |
|  H   | 2       | DMC  | 3721   | Shell Pink-DK       |















| Symbol   | Strands | Type | Number   | Color               |
|--|---------|------|----------|---------------------|
|  | 0       | 2    | DMC 3722 | Shell Pink-MD       |
|  | 4       | 2    | DMC 3726 | Antique Mauve-DK    |
|  | ¢       | 2    | DMC 3731 | Dusty Rose-VYDK     |
|  | ■       | 2    | DMC 3733 | Dusty Rose          |
|  | ⌘       | 2    | DMC 3771 | Terra Cotta-UL VYLT |
|  | L       | 2    | DMC 3778 | Terra Cotta-LT      |
|  | ≡       | 2    | DMC 3779 | Terra Cotta-UL VYLT |
|  | 6       | 2    | DMC 3802 | Antique Mauve-VYDK  |
|  | ↑       | 2    | DMC 3803 | Mauve-MD            |
|  | ↓       | 2    | DMC 3823 | Yellow-UL Pale      |
|  | ▨       | 2    | DMC 3824 | Apricot-LT          |
|  | ⌘       | 2    | DMC 3825 | Pumpkin-Pale        |
|  | ¼       | 2    | DMC 3833 | Raspberry-LT        |
|  | 9       | 2    | DMC 3834 | Grape-DK            |
|  | 8       | 2    | DMC 3835 | Grape-MD            |
|  | H       | 2    | DMC 3856 | Mahogany-UL VYLT    |
|  | ●       | 2    | DMC 3858 | Rosewood-MD         |
|  | ⊙       | 2    | DMC 3865 | Winter White        |

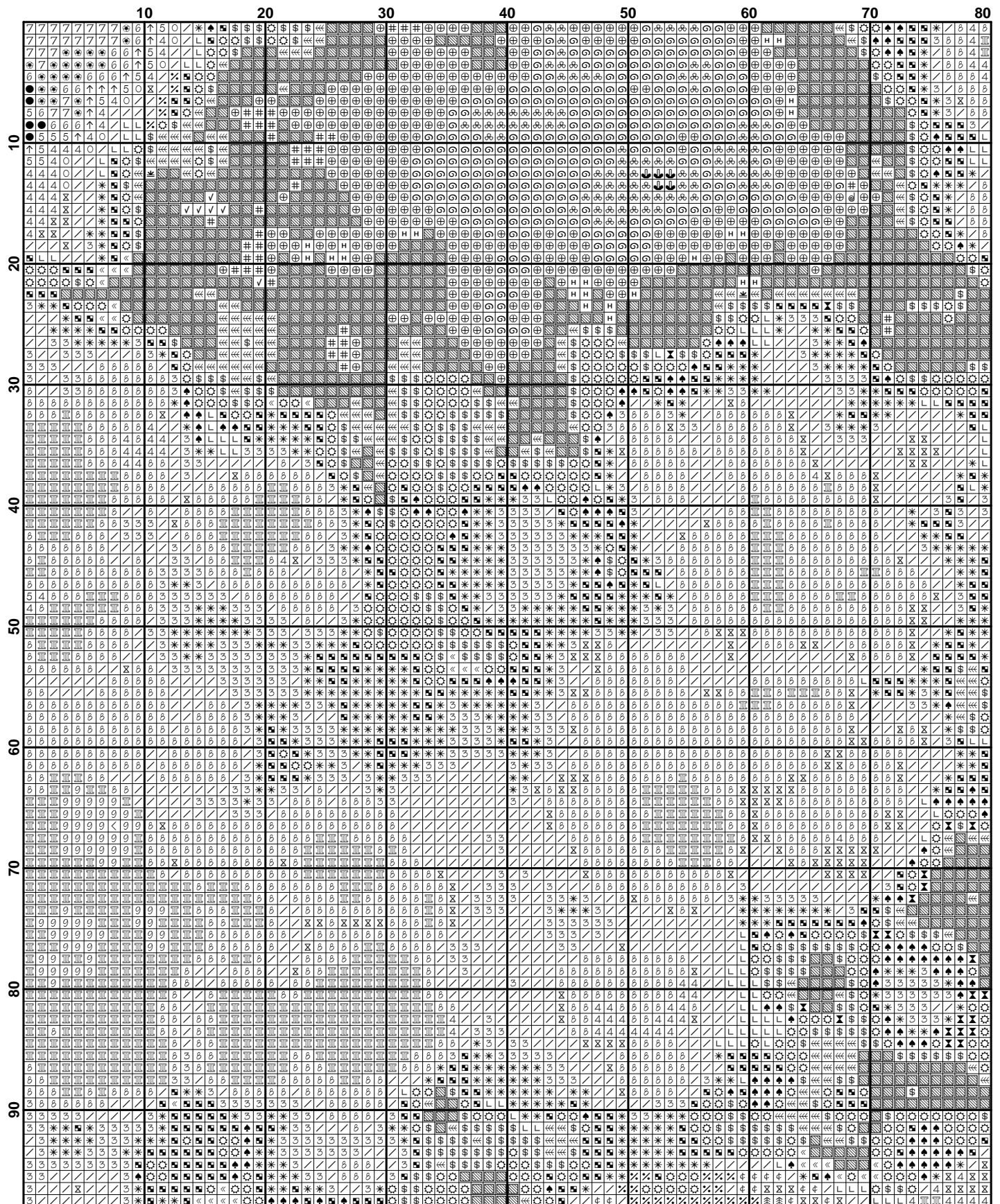
## Usage Summary

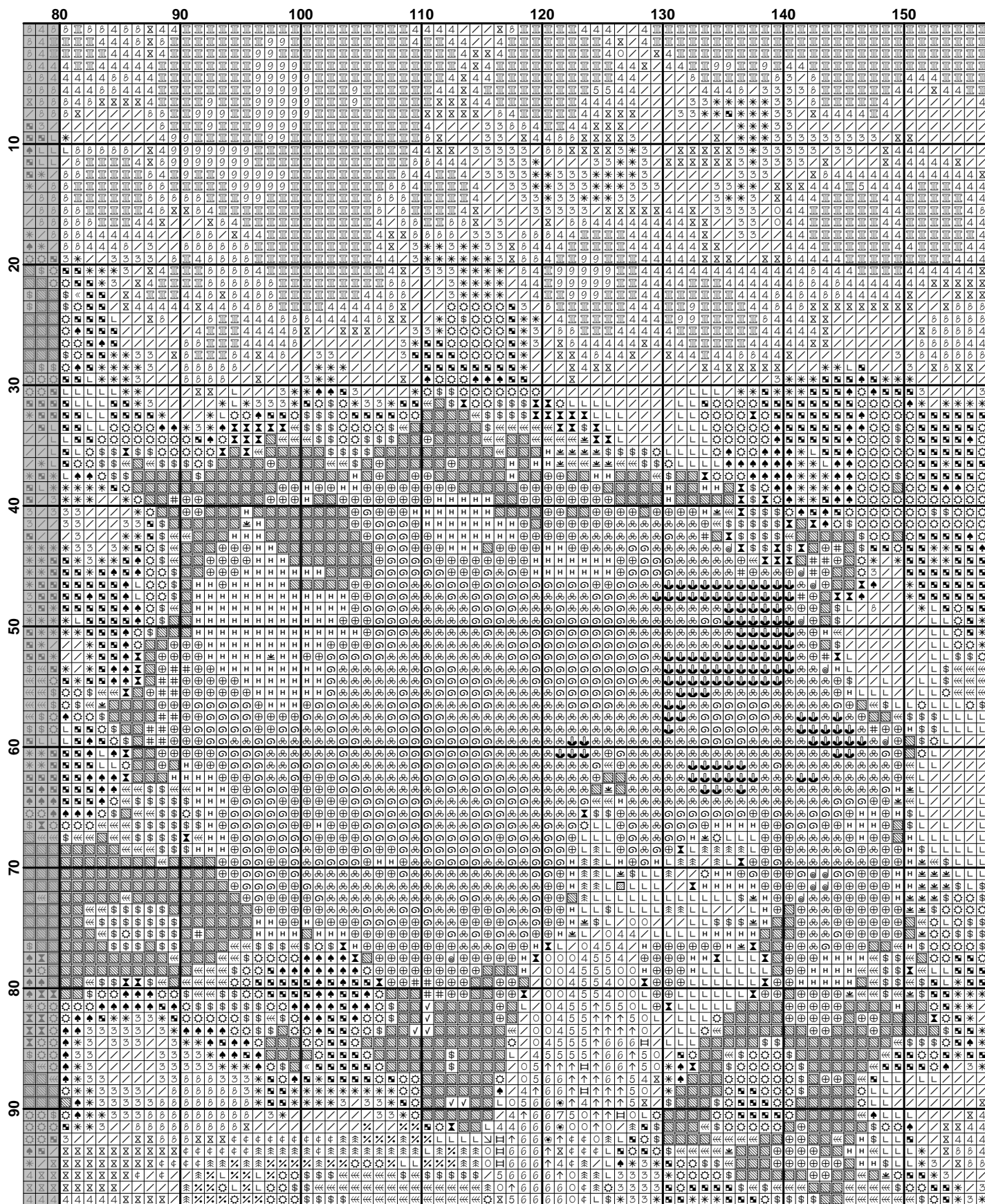
Strands Per Skein: 6

Skein Length: 313.0 in

| Type  | Number | Full  | Half | Quarter | Petite | Back(in) | Str(in) | Spec(in) | French | Bead | Skein Est. |
|---|--------|-------|------|---------|--------|----------|---------|----------|--------|------|------------|
|  DMC 152    | 152    | 2091  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 154    | 154    | 14924 | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 5.000      |
|  DMC 221    | 221    | 106   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 223    | 223    | 15451 | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 5.000      |
|  DMC 310    | 310    | 192   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 315    | 315    | 4743  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 316    | 316    | 4094  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 327    | 327    | 11282 | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 4.000      |
|  DMC 352    | 352    | 9806  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 353    | 353    | 1618  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 356    | 356    | 845   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 402    | 402    | 991   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 550   | 550    | 17801 | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 5.000      |
|  DMC 745  | 745    | 5740  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 754  | 754    | 567   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 760  | 760    | 9724  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 902  | 902    | 1241  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 915  | 915    | 1337  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 917  | 917    | 2919  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 939  | 939    | 9912  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 945  | 945    | 10811 | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 967  | 967    | 489   | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 3078 | 3078   | 8505  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 3341 | 3341   | 8304  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 3350 | 3350   | 3719  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3354 | 3354   | 1268  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 3371 | 3371   | 99    | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 3685 | 3685   | 1379  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 1.000      |
|  DMC 3687 | 3687   | 7112  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3688 | 3688   | 5341  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3712 | 3712   | 6570  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3721 | 3721   | 6316  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3722 | 3722   | 9380  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 3726 | 3726   | 9398  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 3.000      |
|  DMC 3731 | 3731   | 4709  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |
|  DMC 3733 | 3733   | 6204  | 0    | 0       | 0      | 0.0      | 0.0     | 0.0      | 0      | 0    | 2.000      |

| Type  | Number | Full | Half | Quarter | Petite | Back(in) | Str(in) | Spec(in) | French | Bead  | Skein Est. |
|---|--------|------|------|---------|--------|----------|---------|----------|--------|-------|------------|
|  DMC 3771 | 910    | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 1.000 |            |
|  DMC 3778 | 11622  | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 4.000 |            |
|  DMC 3779 | 14     | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 1.000 |            |
|  DMC 3802 | 8239   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 3.000 |            |
|  DMC 3803 | 16638  | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 5.000 |            |
|  DMC 3823 | 9435   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 3.000 |            |
|  DMC 3824 | 11220  | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 4.000 |            |
|  DMC 3825 | 3688   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 2.000 |            |
|  DMC 3833 | 2669   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 1.000 |            |
|  DMC 3834 | 20107  | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 6.000 |            |
|  DMC 3835 | 8593   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 3.000 |            |
|  DMC 3856 | 5015   | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 2.000 |            |
|  DMC 3858 | 209    | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 1.000 |            |
|  DMC 3865 | 403    | 0    | 0    | 0       | 0.0    | 0.0      | 0.0     | 0        | 0      | 1.000 |            |




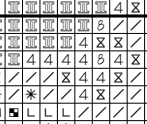
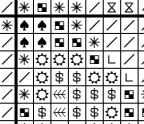
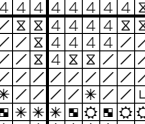
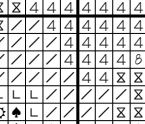
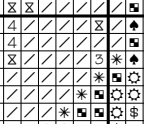
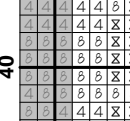
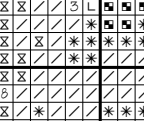
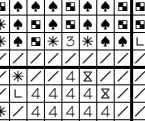
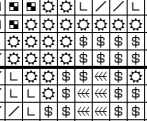
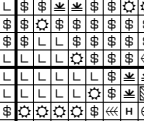
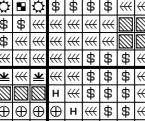
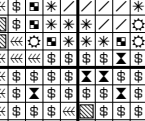
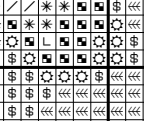
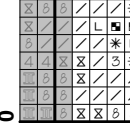
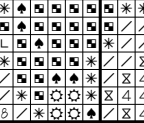
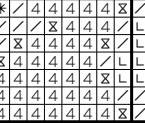
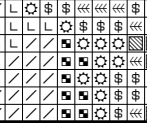
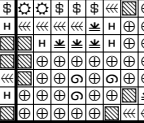
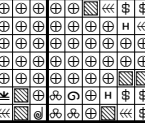
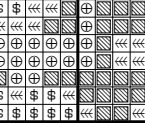
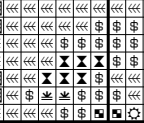
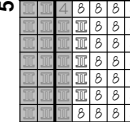
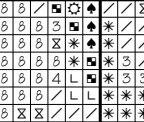
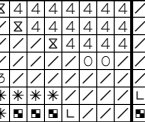
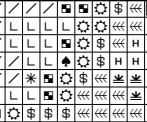
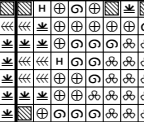
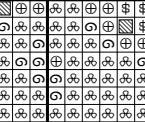
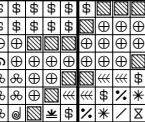
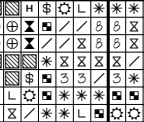

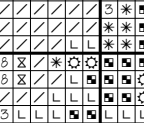
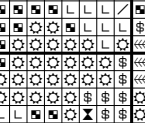
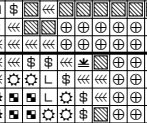
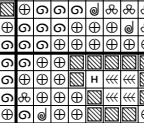
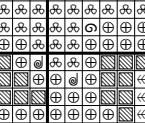
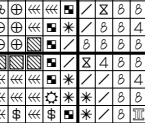


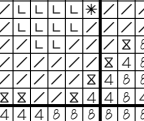
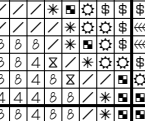
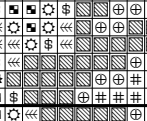
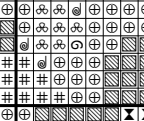
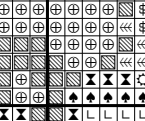
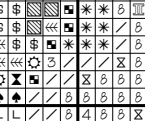


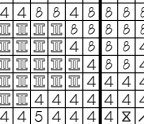
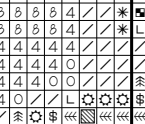
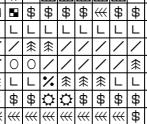
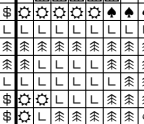
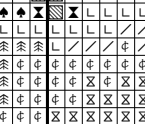
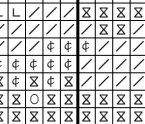


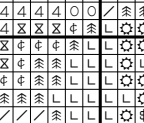
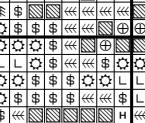

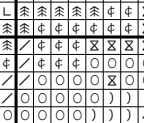
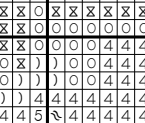
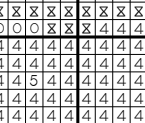

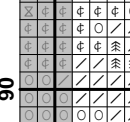
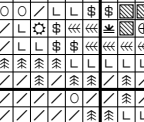
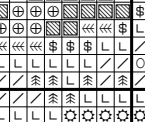
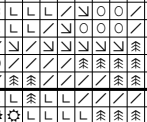
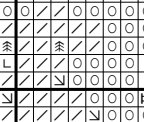

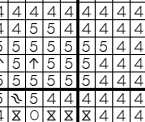





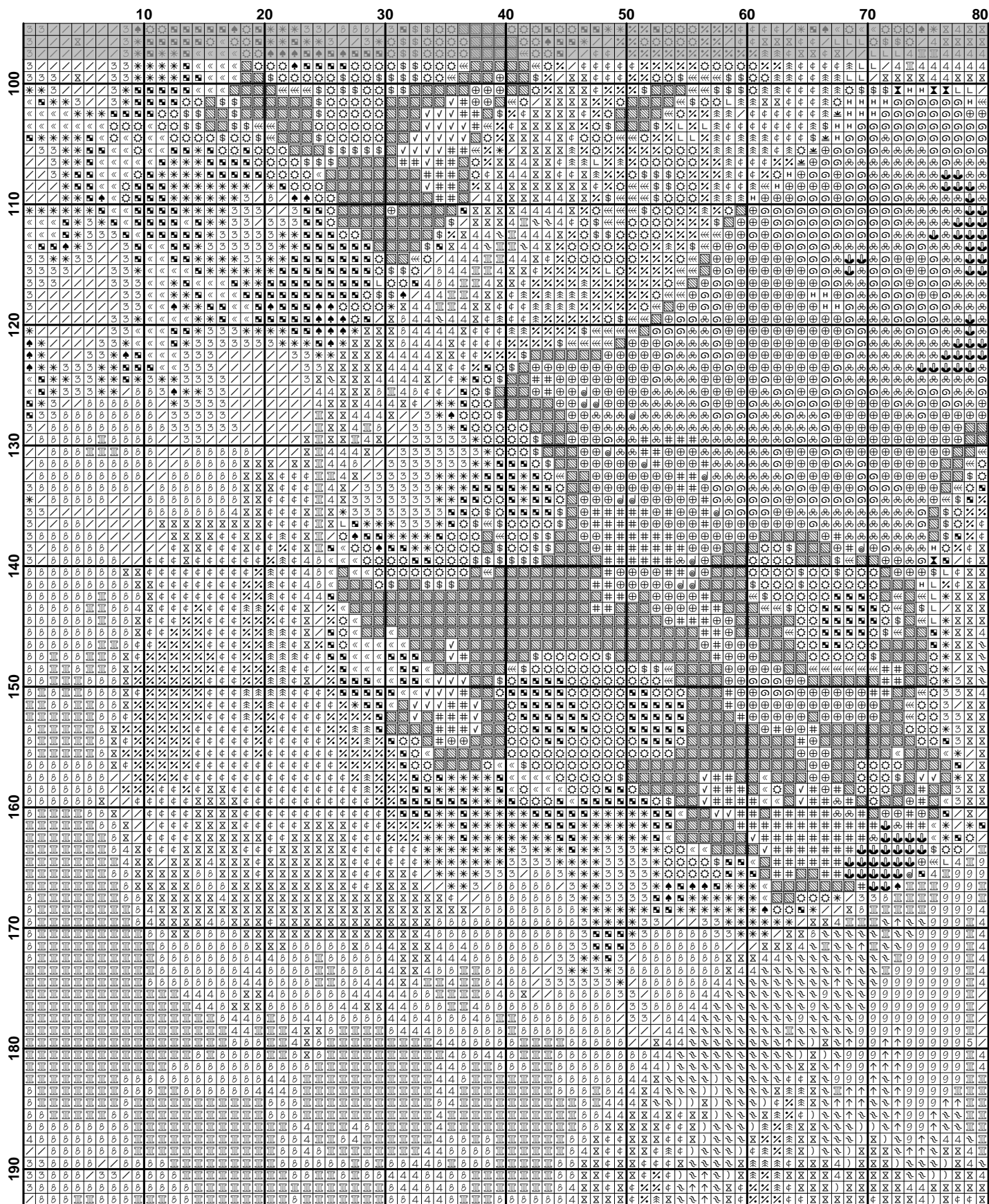


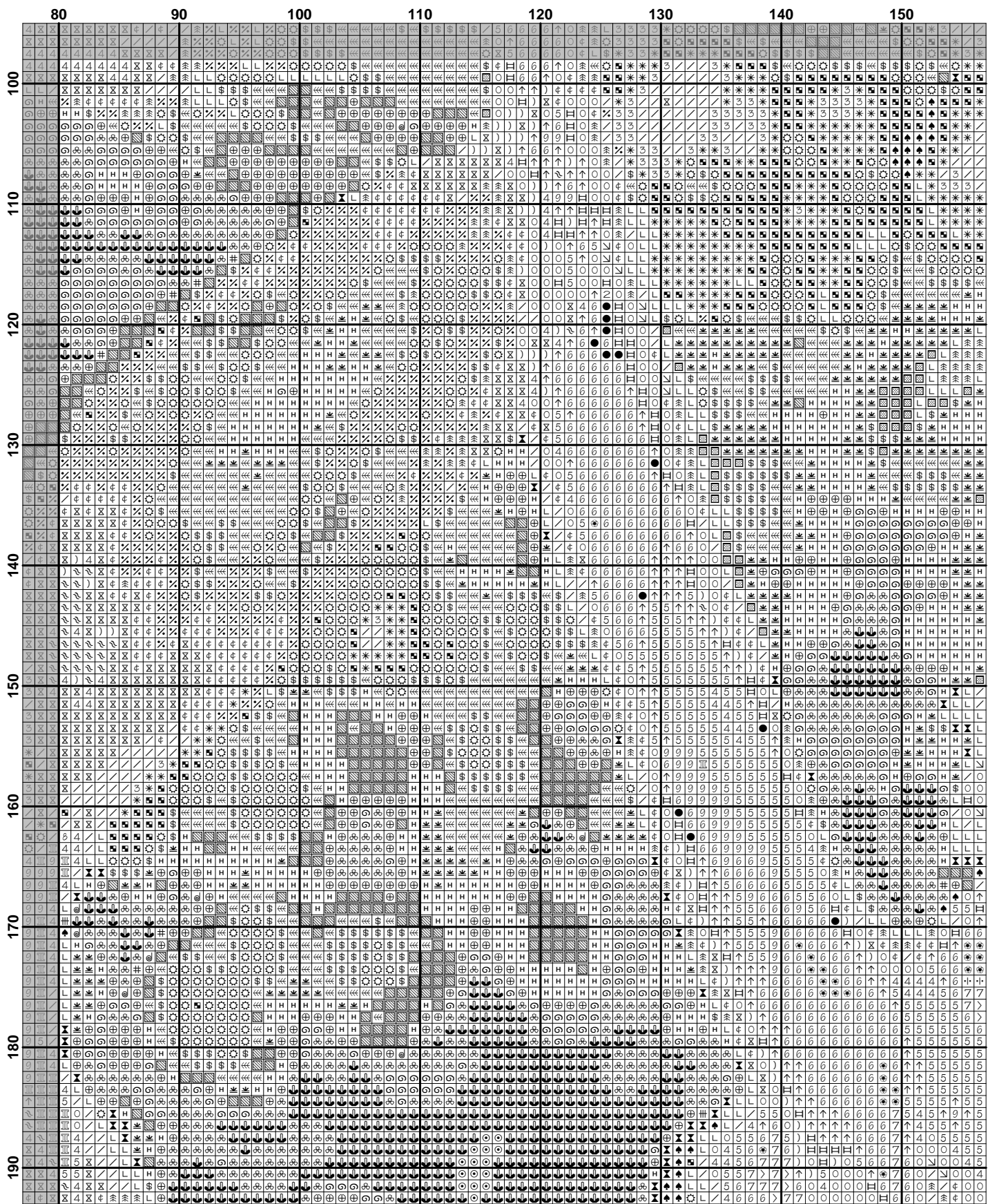
[illegible]

[illegible]

|    | 310   | 320   | 330   | 340   | 350   | 360   | 370  | 380   |
|----|---|---|---|---|---|---|--|---|
| 10 |    |    |    |    |    |    |    |    |
| 20 |    |    |    |    |    |    |    |    |
| 30 |   |   |   |   |   |   |   |   |
| 40 |  |  |  |  |  |  |  |  |
| 50 |  |  |  |  |  |  |  |  |
| 60 |  |  |  |  |  |  |  |  |
| 70 |  |  |  |  |  |  |  |  |
| 80 |  |  |  |  |  |  |  |  |
| 90 |  |  |  |  |  |  |  |  |

[illegible]



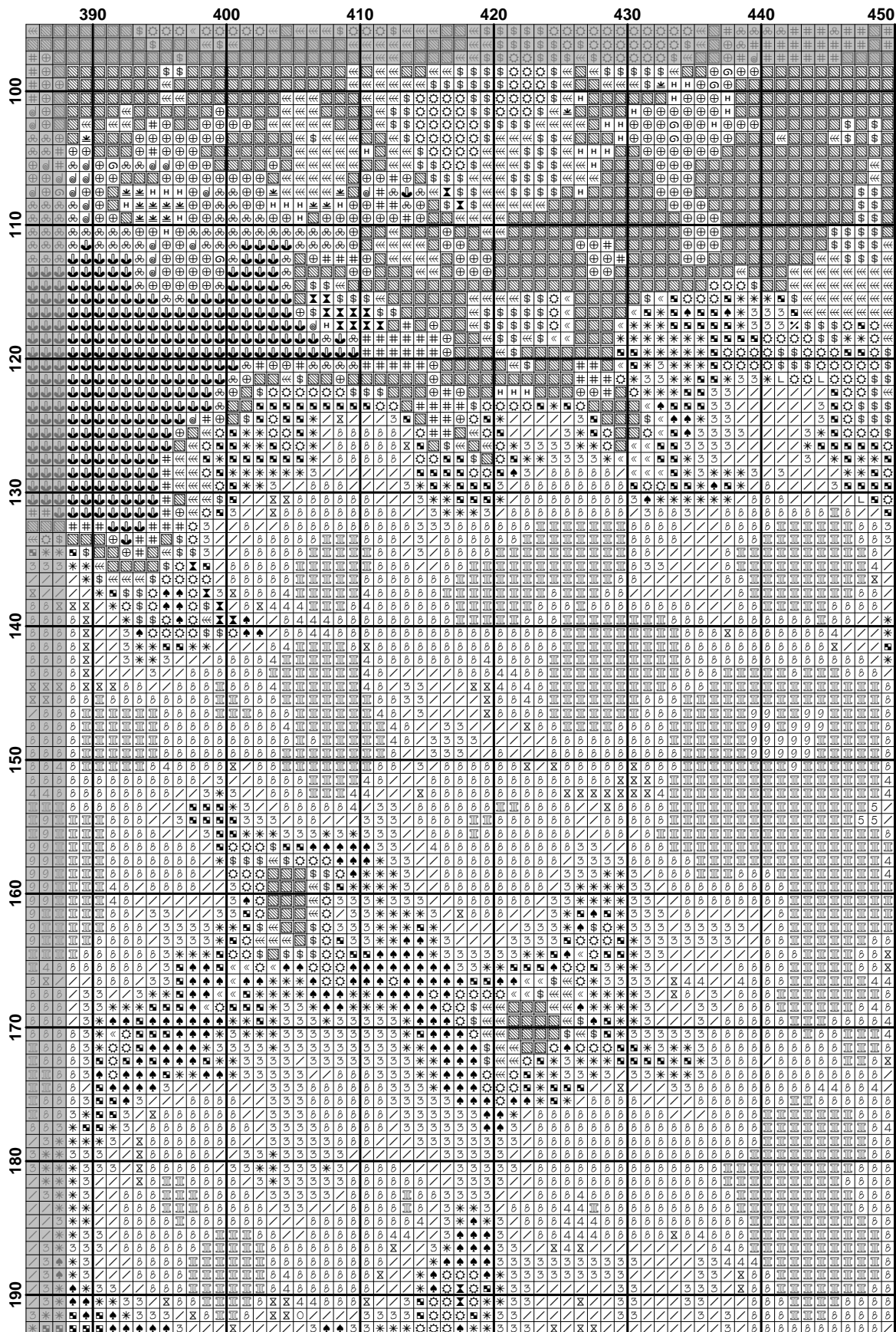


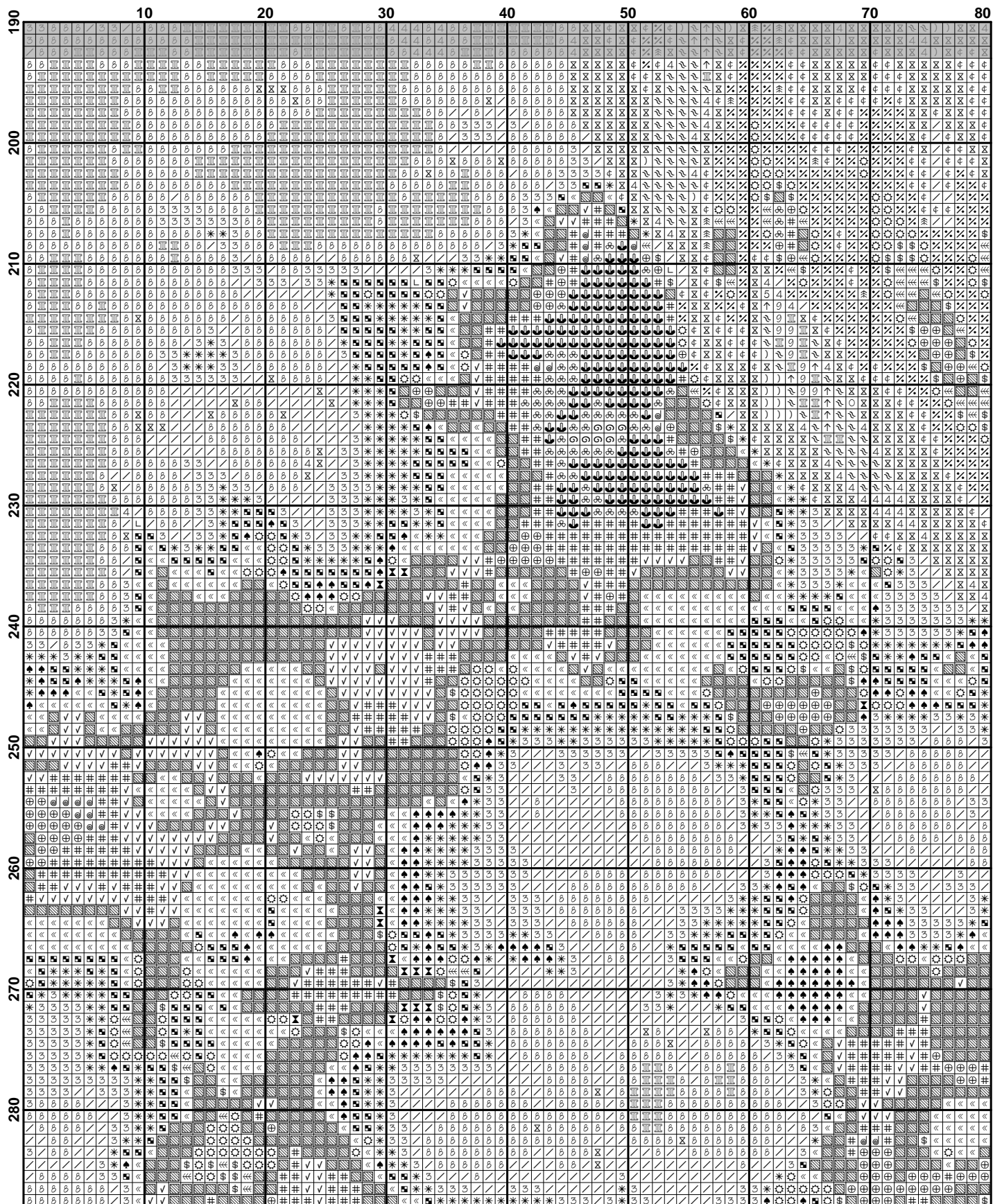
|     | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 |     |     |     |     |     |     |     |     |
| 110 |     |     |     |     |     |     |     |     |
| 120 |     |     |     |     |     |     |     |     |
| 130 |     |     |     |     |     |     |     |     |
| 140 |     |     |     |     |     |     |     |     |
| 150 |     |     |     |     |     |     |     |     |
| 160 |     |     |     |     |     |     |     |     |
| 170 |     |     |     |     |     |     |     |     |
| 180 |     |     |     |     |     |     |     |     |
| 190 |     |     |     |     |     |     |     |     |

|     | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 | ... | ... | ... | ... | ... | ... | ... | ... |
| 110 | ... | ... | ... | ... | ... | ... | ... | ... |
| 120 | ... | ... | ... | ... | ... | ... | ... | ... |
| 130 | ... | ... | ... | ... | ... | ... | ... | ... |
| 140 | ... | ... | ... | ... | ... | ... | ... | ... |
| 150 | ... | ... | ... | ... | ... | ... | ... | ... |
| 160 | ... | ... | ... | ... | ... | ... | ... | ... |
| 170 | ... | ... | ... | ... | ... | ... | ... | ... |
| 180 | ... | ... | ... | ... | ... | ... | ... | ... |
| 190 | ... | ... | ... | ... | ... | ... | ... | ... |









|     | 80  | 90  | 100 | 110 | 120 | 130 | 140 | 150 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 190 | ... | ... | ... | ... | ... | ... | ... | ... |
| 200 | ... | ... | ... | ... | ... | ... | ... | ... |
| 210 | ... | ... | ... | ... | ... | ... | ... | ... |
| 220 | ... | ... | ... | ... | ... | ... | ... | ... |
| 230 | ... | ... | ... | ... | ... | ... | ... | ... |
| 240 | ... | ... | ... | ... | ... | ... | ... | ... |
| 250 | ... | ... | ... | ... | ... | ... | ... | ... |
| 260 | ... | ... | ... | ... | ... | ... | ... | ... |
| 270 | ... | ... | ... | ... | ... | ... | ... | ... |
| 280 | ... | ... | ... | ... | ... | ... | ... | ... |

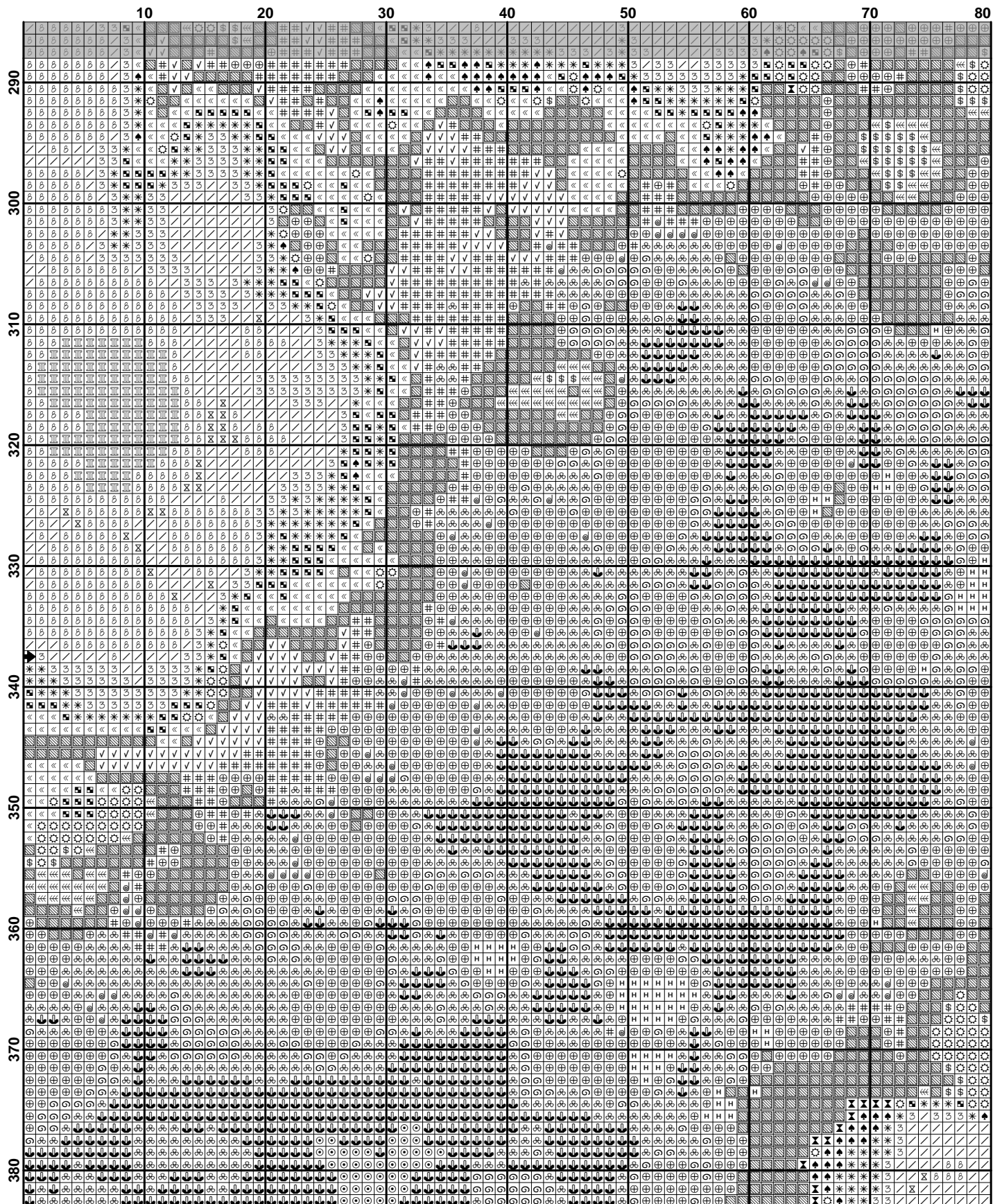


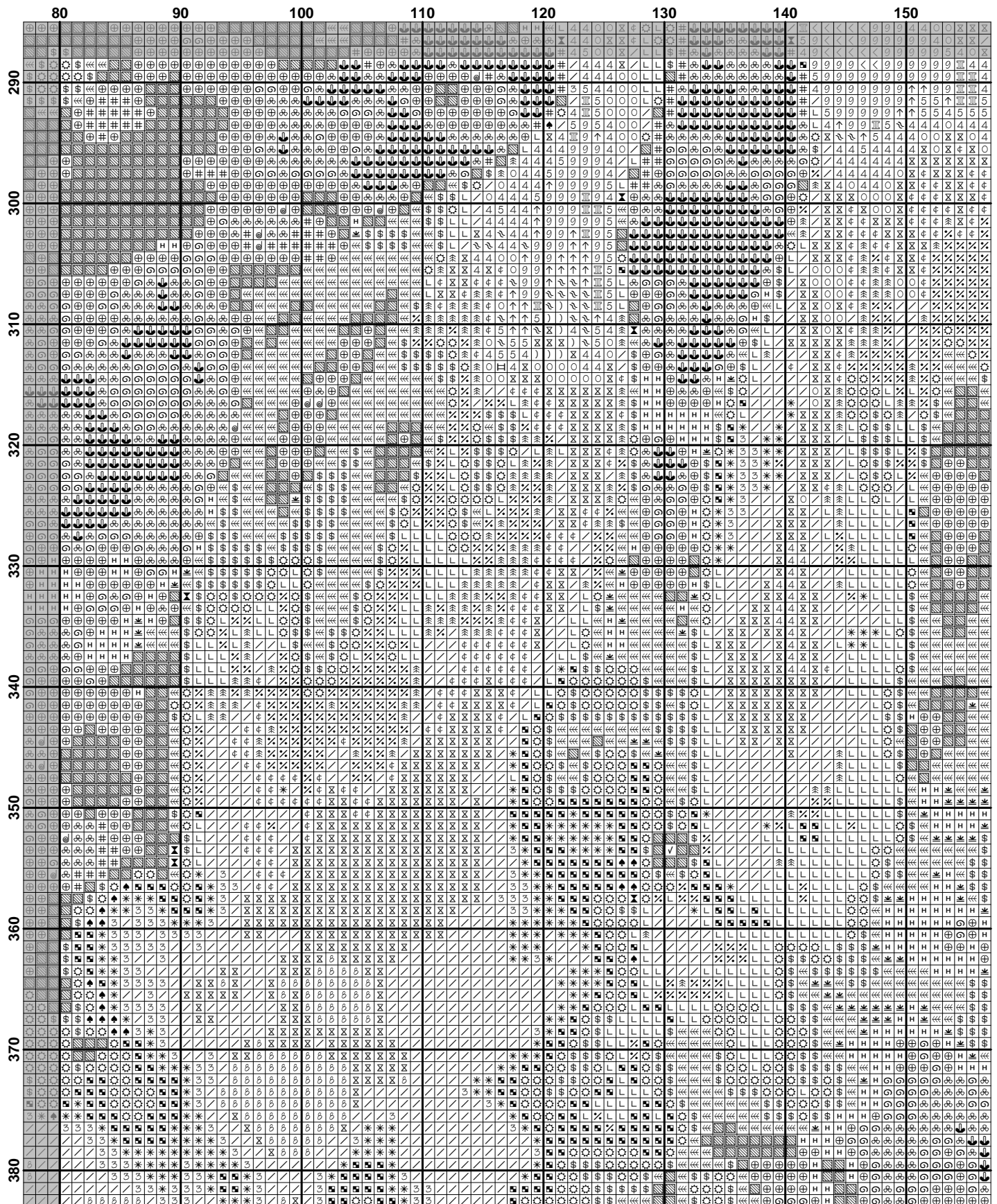
|     |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
|-----|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|
|     | 240 |  |  |  |  |  |  |  |  |  | 250 |  |  |  |  |  |  |  |  |  | 260 |  |  |  |  |  |  |  |  |  | 270 |  |  |  |  |  |  |  |  |  | 280 |  |  |  |  |  |  |  |  |  | 290 |  |  |  |  |  |  |  |  |  | 300 |  |  |  |  |  |  |  |  |  | 310 |  |  |  |  |  |  |  |  |  |
| 190 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 200 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 210 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 220 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 230 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 240 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 250 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 260 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 270 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |
| 280 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |

$$(23) \quad \mathcal{H}^{\text{reg}}_{\text{reg}} = \mathcal{H}^{\text{reg}}_{\text{reg}} \quad (24)$$

|     | 390 | 400 | 410 | 420 | 430 | 440 | 450 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 190 | ... | ... | ... | ... | ... | ... | ... |
| 200 | ... | ... | ... | ... | ... | ... | ... |
| 210 | ... | ... | ... | ... | ... | ... | ... |
| 220 | ... | ... | ... | ... | ... | ... | ... |
| 230 | ... | ... | ... | ... | ... | ... | ... |
| 240 | ... | ... | ... | ... | ... | ... | ... |
| 250 | ... | ... | ... | ... | ... | ... | ... |
| 260 | ... | ... | ... | ... | ... | ... | ... |
| 270 | ... | ... | ... | ... | ... | ... | ... |
| 280 | ... | ... | ... | ... | ... | ... | ... |



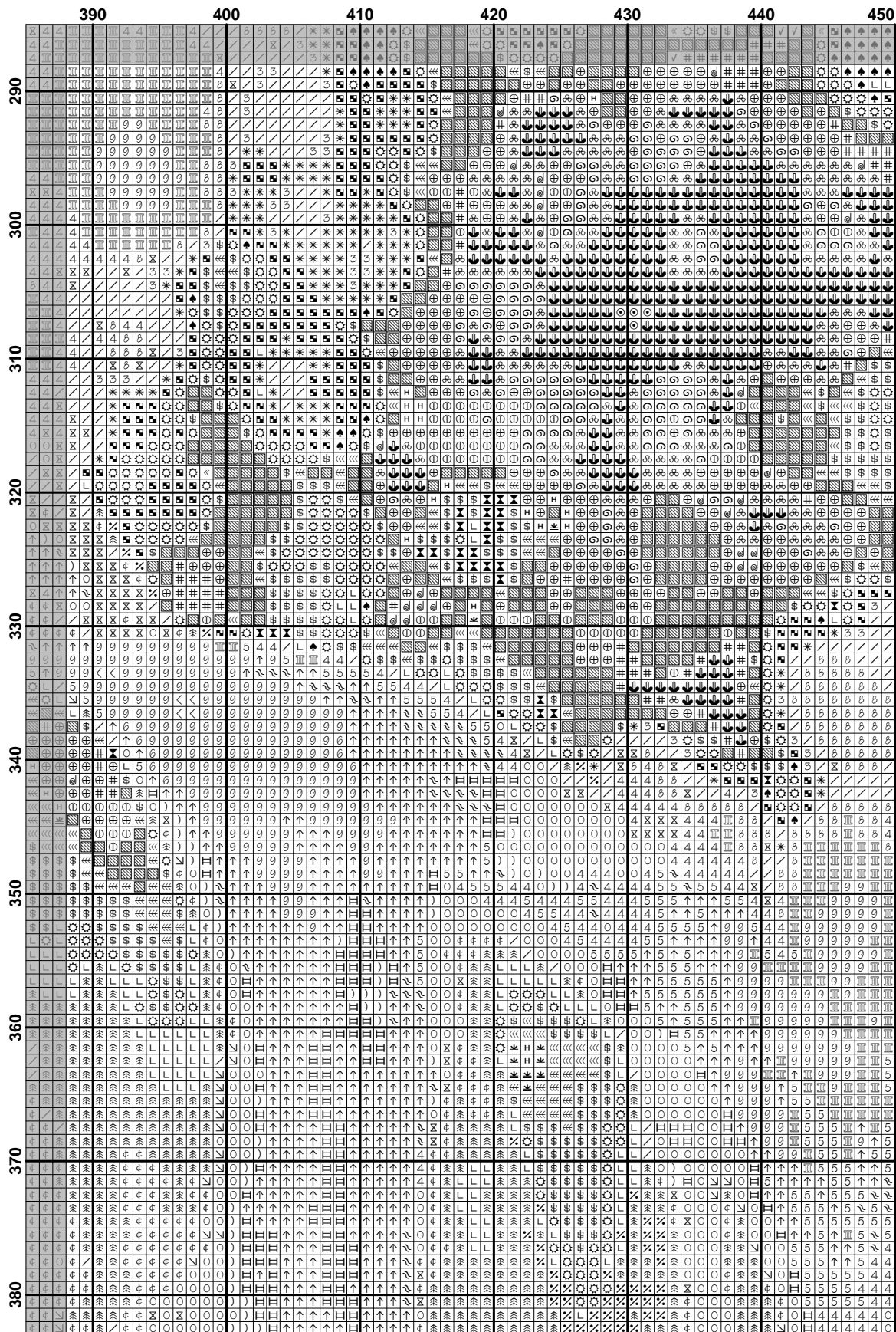


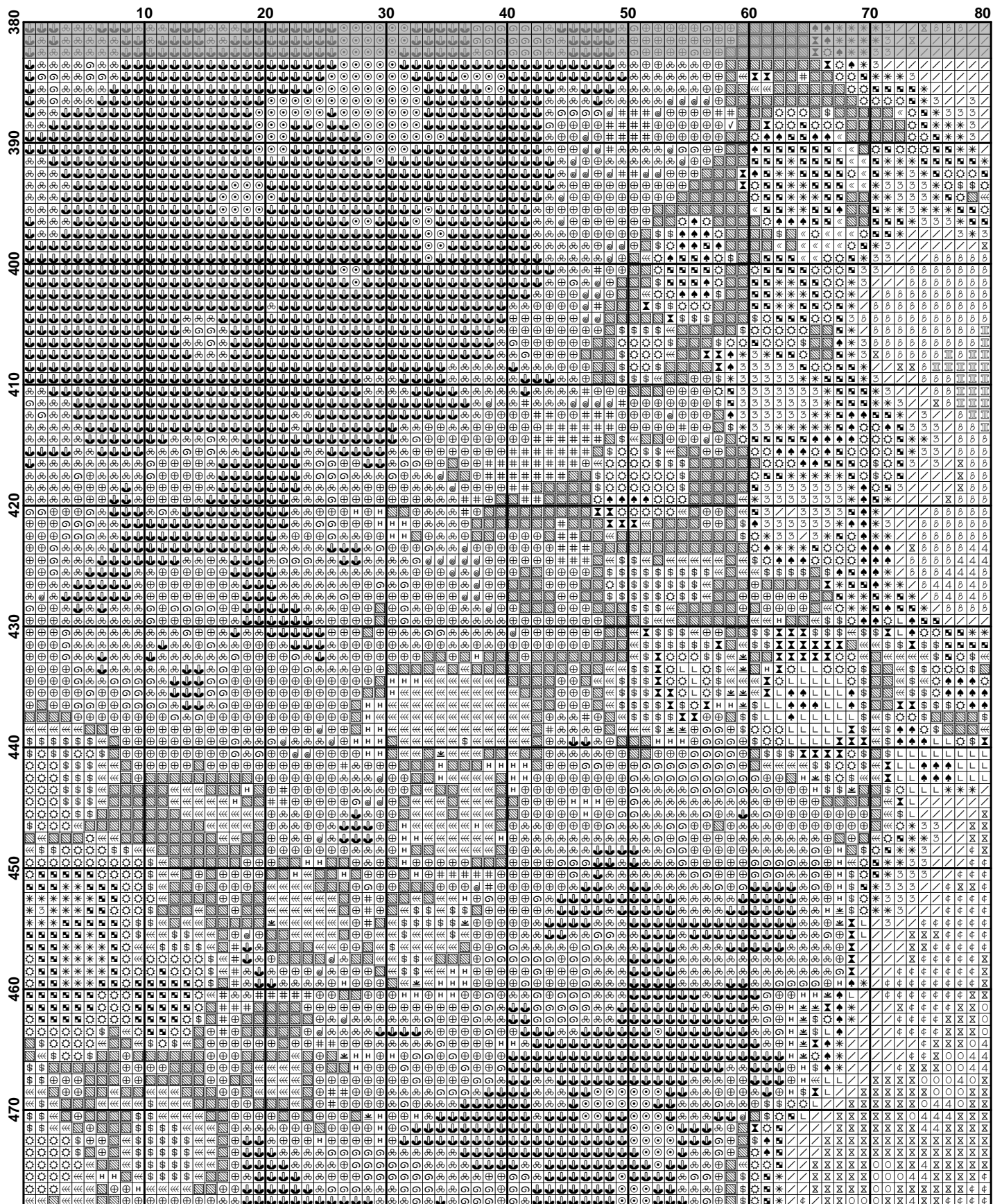


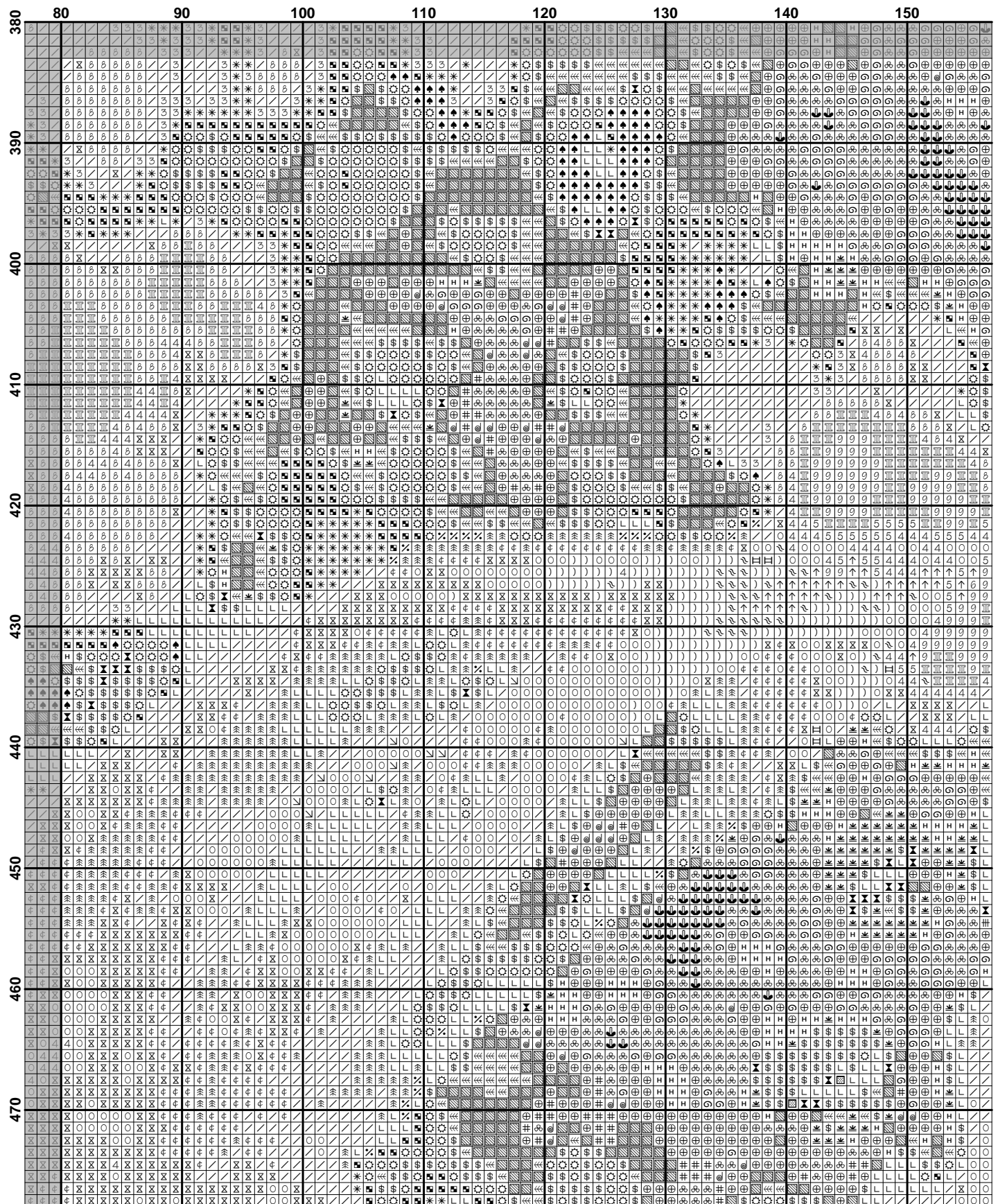
|     | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 290 |     |     |     |     |     |     |     |     |
| 300 |     |     |     |     |     |     |     |     |
| 310 |     |     |     |     |     |     |     |     |
| 320 |     |     |     |     |     |     |     |     |
| 330 |     |     |     |     |     |     |     |     |
| 340 |     |     |     |     |     |     |     |     |
| 350 |     |     |     |     |     |     |     |     |
| 360 |     |     |     |     |     |     |     |     |
| 370 |     |     |     |     |     |     |     |     |
| 380 |     |     |     |     |     |     |     |     |

|     | 240 |  |  |  |  |  |  |  |  |  | 250 |  |  |  |  |  |  |  |  |  | 260 |  |  |  |  |  |  |  |  |  | 270 |  |  |  |  |  |  |  |  |  | 280 |  |  |  |  |  |  |  |  |  | 290 |  |  |  |  |  |  |  |  |  | 300 |  |  |  |  |  |  |  |  |  | 310 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 290 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 300 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 310 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 320 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 330 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 340 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 350 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 360 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 370 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 380 |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|     | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 290 | ... | ... | ... | ... | ... | ... | ... | ... |
| 300 | ... | ... | ... | ... | ... | ... | ... | ... |
| 310 | ... | ... | ... | ... | ... | ... | ... | ... |
| 320 | ... | ... | ... | ... | ... | ... | ... | ... |
| 330 | ... | ... | ... | ... | ... | ... | ... | ... |
| 340 | ... | ... | ... | ... | ... | ... | ... | ... |
| 350 | ... | ... | ... | ... | ... | ... | ... | ... |
| 360 | ... | ... | ... | ... | ... | ... | ... | ... |
| 370 | ... | ... | ... | ... | ... | ... | ... | ... |
| 380 | ... | ... | ... | ... | ... | ... | ... | ... |









|     | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 380 | ... | ... | ... | ... | ... | ... | ... | ... |
| 390 | ... | ... | ... | ... | ... | ... | ... | ... |
| 400 | ... | ... | ... | ... | ... | ... | ... | ... |
| 410 | ... | ... | ... | ... | ... | ... | ... | ... |
| 420 | ... | ... | ... | ... | ... | ... | ... | ... |
| 430 | ... | ... | ... | ... | ... | ... | ... | ... |
| 440 | ... | ... | ... | ... | ... | ... | ... | ... |
| 450 | ... | ... | ... | ... | ... | ... | ... | ... |
| 460 | ... | ... | ... | ... | ... | ... | ... | ... |
| 470 | ... | ... | ... | ... | ... | ... | ... | ... |

|     | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 380 |     |     |     |     |     |     |     |     |
| 390 |     |     |     |     |     |     |     |     |
| 400 |     |     |     |     |     |     |     |     |
| 410 |     |     |     |     |     |     |     |     |
| 420 |     |     |     |     |     |     |     |     |
| 430 |     |     |     |     |     |     |     |     |
| 440 |     |     |     |     |     |     |     |     |
| 450 |     |     |     |     |     |     |     |     |
| 460 |     |     |     |     |     |     |     |     |
| 470 |     |     |     |     |     |     |     |     |

|     | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 380 | ... | ... | ... | ... | ... | ... | ... | ... |
| 390 | ... | ... | ... | ... | ... | ... | ... | ... |
| 400 | ... | ... | ... | ... | ... | ... | ... | ... |
| 410 | ... | ... | ... | ... | ... | ... | ... | ... |
| 420 | ... | ... | ... | ... | ... | ... | ... | ... |
| 430 | ... | ... | ... | ... | ... | ... | ... | ... |
| 440 | ... | ... | ... | ... | ... | ... | ... | ... |
| 450 | ... | ... | ... | ... | ... | ... | ... | ... |
| 460 | ... | ... | ... | ... | ... | ... | ... | ... |
| 470 | ... | ... | ... | ... | ... | ... | ... | ... |

|     | 390 | 400 | 410 | 420 | 430 | 440 | 450 |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 380 | ... | ... | ... | ... | ... | ... | ... |
| 390 | ... | ... | ... | ... | ... | ... | ... |
| 400 | ... | ... | ... | ... | ... | ... | ... |
| 410 | ... | ... | ... | ... | ... | ... | ... |
| 420 | ... | ... | ... | ... | ... | ... | ... |
| 430 | ... | ... | ... | ... | ... | ... | ... |
| 440 | ... | ... | ... | ... | ... | ... | ... |
| 450 | ... | ... | ... | ... | ... | ... | ... |
| 460 | ... | ... | ... | ... | ... | ... | ... |
| 470 | ... | ... | ... | ... | ... | ... | ... |

|     | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 480 | ... | ... | ... | ... | ... | ... | ... | ... |
| 490 | ... | ... | ... | ... | ... | ... | ... | ... |
| 500 | ... | ... | ... | ... | ... | ... | ... | ... |
| 510 | ... | ... | ... | ... | ... | ... | ... | ... |
| 520 | ... | ... | ... | ... | ... | ... | ... | ... |
| 530 | ... | ... | ... | ... | ... | ... | ... | ... |
| 540 | ... | ... | ... | ... | ... | ... | ... | ... |
| 550 | ... | ... | ... | ... | ... | ... | ... | ... |
| 560 | ... | ... | ... | ... | ... | ... | ... | ... |
| 570 | ... | ... | ... | ... | ... | ... | ... | ... |

|     | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
|-----|----|----|-----|-----|-----|-----|-----|-----|
| 480 | X  | X  | X   | X   | X   | X   | X   | X   |
| 481 | X  | X  | X   | X   | X   | X   | X   | X   |
| 482 | X  | X  | X   | X   | X   | X   | X   | X   |
| 483 | X  | X  | X   | X   | X   | X   | X   | X   |
| 484 | X  | X  | X   | X   | X   | X   | X   | X   |
| 485 | X  | X  | X   | X   | X   | X   | X   | X   |
| 486 | X  | X  | X   | X   | X   | X   | X   | X   |
| 487 | X  | X  | X   | X   | X   | X   | X   | X   |
| 488 | X  | X  | X   | X   | X   | X   | X   | X   |
| 489 | X  | X  | X   | X   | X   | X   | X   | X   |
| 490 | X  | X  | X   | X   | X   | X   | X   | X   |
| 491 | X  | X  | X   | X   | X   | X   | X   | X   |
| 492 | X  | X  | X   | X   | X   | X   | X   | X   |
| 493 | X  | X  | X   | X   | X   | X   | X   | X   |
| 494 | X  | X  | X   | X   | X   | X   | X   | X   |
| 495 | X  | X  | X   | X   | X   | X   | X   | X   |
| 496 | X  | X  | X   | X   | X   | X   | X   | X   |
| 497 | X  | X  | X   | X   | X   | X   | X   | X   |
| 498 | X  | X  | X   | X   | X   | X   | X   | X   |
| 499 | X  | X  | X   | X   | X   | X   | X   | X   |
| 500 | X  | X  | X   | X   | X   | X   | X   | X   |
| 501 | X  | X  | X   | X   | X   | X   | X   | X   |
| 502 | X  | X  | X   | X   | X   | X   | X   | X   |
| 503 | X  | X  | X   | X   | X   | X   | X   | X   |
| 504 | X  | X  | X   | X   | X   | X   | X   | X   |
| 505 | X  | X  | X   | X   | X   | X   | X   | X   |
| 506 | X  | X  | X   | X   | X   | X   | X   | X   |
| 507 | X  | X  | X   | X   | X   | X   | X   | X   |
| 508 | X  | X  | X   | X   | X   | X   | X   | X   |
| 509 | X  | X  | X   | X   | X   | X   | X   | X   |
| 510 | X  | X  | X   | X   | X   | X   | X   | X   |
| 511 | X  | X  | X   | X   | X   | X   | X   | X   |
| 512 | X  | X  | X   | X   | X   | X   | X   | X   |
| 513 | X  | X  | X   | X   | X   | X   | X   | X   |
| 514 | X  | X  | X   | X   | X   | X   | X   | X   |
| 515 | X  | X  | X   | X   | X   | X   | X   | X   |
| 516 | X  | X  | X   | X   | X   | X   | X   | X   |
| 517 | X  | X  | X   | X   | X   | X   | X   | X   |
| 518 | X  | X  | X   | X   | X   | X   | X   | X   |
| 519 | X  | X  | X   | X   | X   | X   | X   | X   |
| 520 | X  | X  | X   | X   | X   | X   | X   | X   |
| 521 | X  | X  | X   | X   | X   | X   | X   | X   |
| 522 | X  | X  | X   | X   | X   | X   | X   | X   |
| 523 | X  | X  | X   | X   | X   | X   | X   | X   |
| 524 | X  | X  | X   | X   | X   | X   | X   | X   |
| 525 | X  | X  | X   | X   | X   | X   | X   | X   |
| 526 | X  | X  | X   | X   | X   | X   | X   | X   |
| 527 | X  | X  | X   | X   | X   | X   | X   | X   |
| 528 | X  | X  | X   | X   | X   | X   | X   | X   |
| 529 | X  | X  | X   | X   | X   | X   | X   | X   |
| 530 | X  | X  | X   | X   | X   | X   | X   | X   |
| 531 | X  | X  | X   | X   | X   | X   | X   | X   |
| 532 | X  | X  | X   | X   | X   | X   | X   | X   |
| 533 | X  | X  | X   | X   | X   | X   | X   | X   |
| 534 | X  | X  | X   | X   | X   | X   | X   | X   |
| 535 | X  | X  | X   | X   | X   | X   | X   | X   |
| 536 | X  | X  | X   | X   | X   | X   | X   | X   |
| 537 | X  | X  | X   | X   | X   | X   | X   | X   |
| 538 | X  | X  | X   | X   | X   | X   | X   | X   |
| 539 | X  | X  | X   | X   | X   | X   | X   | X   |
| 540 | X  | X  | X   | X   | X   | X   | X   | X   |
| 541 | X  | X  | X   | X   | X   | X   | X   | X   |
| 542 | X  | X  | X   | X   | X   | X   | X   | X   |
| 543 | X  | X  | X   | X   | X   | X   | X   | X   |
| 544 | X  | X  | X   | X   | X   | X   | X   | X   |
| 545 | X  | X  | X   | X   | X   | X   | X   | X   |
| 546 | X  | X  | X   | X   | X   | X   | X   | X   |
| 547 | X  | X  | X   | X   | X   | X   | X   | X   |
| 548 | X  | X  | X   | X   | X   | X   | X   | X   |
| 549 | X  | X  | X   | X   | X   | X   | X   | X   |
| 550 | X  | X  | X   | X   | X   | X   | X   | X   |
| 551 | X  | X  | X   | X   | X   | X   | X   | X   |
| 552 | X  | X  | X   | X   | X   | X   | X   | X   |
| 553 | X  | X  | X   | X   | X   | X   | X   | X   |
| 554 | X  | X  | X   | X   | X   | X   | X   | X   |
| 555 | X  | X  | X   | X   | X   | X   | X   | X   |
| 556 | X  | X  | X   | X   | X   | X   | X   | X   |
| 557 | X  | X  | X   | X   | X   | X   | X   | X   |
| 558 | X  | X  | X   | X   | X   | X   | X   | X   |
| 559 | X  | X  | X   | X   | X   | X   | X   | X   |
| 560 | X  | X  | X   | X   | X   | X   | X   | X   |
| 561 | X  | X  | X   | X   | X   | X   | X   | X   |
| 562 | X  | X  | X   | X   | X   | X   | X   | X   |
| 563 | X  | X  | X   | X   | X   | X   | X   | X   |
| 564 | X  | X  | X   | X   | X   | X   | X   | X   |
| 565 | X  | X  | X   | X   | X   | X   | X   | X   |
| 566 | X  | X  | X   | X   | X   | X   | X   | X   |
| 567 | X  | X  | X   | X   | X   | X   | X   | X   |
| 568 | X  | X  | X   | X   | X   | X   | X   | X   |
| 569 | X  | X  | X   | X   | X   | X   | X   | X   |
| 570 | X  | X  | X   | X   | X   | X   | X   | X   |
| 571 | X  | X  | X   | X   | X   | X   | X   | X   |
| 572 | X  | X  | X   | X   | X   | X   | X   | X   |
| 573 | X  | X  | X   | X   | X   | X   | X   | X   |
| 574 | X  | X  | X   | X   | X   | X   | X   | X   |
| 575 | X  | X  | X   | X   | X   | X   | X   | X   |
| 576 | X  | X  | X   | X   | X   | X   | X   | X   |
| 577 | X  | X  | X   | X   | X   | X   | X   | X   |
| 578 | X  | X  | X   | X   | X   | X   | X   | X   |
| 579 | X  | X  | X   | X   | X   | X   | X   | X   |
| 580 | X  | X  | X   | X   | X   | X   | X   | X   |

|     | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 480 | ... | ... | ... | ... | ... | ... | ... | ... |
| 490 | ... | ... | ... | ... | ... | ... | ... | ... |
| 500 | ... | ... | ... | ... | ... | ... | ... | ... |
| 510 | ... | ... | ... | ... | ... | ... | ... | ... |
| 520 | ... | ... | ... | ... | ... | ... | ... | ... |
| 530 | ... | ... | ... | ... | ... | ... | ... | ... |
| 540 | ... | ... | ... | ... | ... | ... | ... | ... |
| 550 | ... | ... | ... | ... | ... | ... | ... | ... |
| 560 | ... | ... | ... | ... | ... | ... | ... | ... |
| 570 | ... | ... | ... | ... | ... | ... | ... | ... |

|     | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 480 |     |     |     |     |     |     |     |     |
| 490 |     |     |     |     |     |     |     |     |
| 500 |     |     |     |     |     |     |     |     |
| 510 |     |     |     |     |     |     |     |     |
| 520 |     |     |     |     |     |     |     |     |
| 530 |     |     |     |     |     |     |     |     |
| 540 |     |     |     |     |     |     |     |     |
| 550 |     |     |     |     |     |     |     |     |
| 560 |     |     |     |     |     |     |     |     |
| 570 |     |     |     |     |     |     |     |     |



|     | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 480 |     |     |     |     |     |     |     |     |
| 490 |     |     |     |     |     |     |     |     |
| 500 |     |     |     |     |     |     |     |     |
| 510 |     |     |     |     |     |     |     |     |
| 520 |     |     |     |     |     |     |     |     |
| 530 |     |     |     |     |     |     |     |     |
| 540 |     |     |     |     |     |     |     |     |
| 550 |     |     |     |     |     |     |     |     |
| 560 |     |     |     |     |     |     |     |     |
| 570 |     |     |     |     |     |     |     |     |

[illegible]

|     | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
|-----|----|----|----|----|----|----|----|----|
| 570 |    |    |    |    |    |    |    |    |
| 580 |    |    |    |    |    |    |    |    |
| 590 |    |    |    |    |    |    |    |    |
| 600 |    |    |    |    |    |    |    |    |
| 610 |    |    |    |    |    |    |    |    |
| 620 |    |    |    |    |    |    |    |    |
| 630 |    |    |    |    |    |    |    |    |
| 640 |    |    |    |    |    |    |    |    |
| 650 |    |    |    |    |    |    |    |    |
| 660 |    |    |    |    |    |    |    |    |

[illegible]

|     | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 570 |     |     |     |     |     |     |     |     |
| 580 |     |     |     |     |     |     |     |     |
| 590 |     |     |     |     |     |     |     |     |
| 600 |     |     |     |     |     |     |     |     |
| 610 |     |     |     |     |     |     |     |     |
| 620 |     |     |     |     |     |     |     |     |
| 630 |     |     |     |     |     |     |     |     |
| 640 |     |     |     |     |     |     |     |     |
| 650 |     |     |     |     |     |     |     |     |
| 660 |     |     |     |     |     |     |     |     |



|     | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 570 |     |     |     |     |     |     |     |     |
| 580 |     |     |     |     |     |     |     |     |
| 590 |     |     |     |     |     |     |     |     |
| 600 |     |     |     |     |     |     |     |     |
| 610 |     |     |     |     |     |     |     |     |
| 620 |     |     |     |     |     |     |     |     |
| 630 |     |     |     |     |     |     |     |     |
| 640 |     |     |     |     |     |     |     |     |
| 650 |     |     |     |     |     |     |     |     |
| 660 |     |     |     |     |     |     |     |     |













|     | 310 |    |    |    | 320 |    |    |    | 330 |    |    |    | 340 |    |    |    | 350 |    |    |    | 360 |    |    |    | 370 |    |    |    | 380 |    |    |    |
|-----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|-----|----|----|----|
| 670 | 0   | 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 |
|     | 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 |
|     | 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 |
|     | 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 |
|     | 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 |
|     | 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 | 51 |
|     | 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 | 51 | 52  | 53 | 54 | 55 |
|     | 28  | 29 | 30 | 31 | 32  | 33 | 34 | 35 | 36  | 37 | 38 | 39 | 40  | 41 | 42 | 43 | 44  | 45 | 46 | 47 | 48  | 49 | 50 | 51 | 52  | 53 | 54 | 55 | 56  | 57 | 58 | 59 |
|     | 32  | 33 | 34 | 35 | 36  | 37 | 38 | 39 | 40  | 41 | 42 | 43 | 44  | 45 | 46 | 47 | 48  | 49 | 50 | 51 | 52  | 53 | 54 | 55 | 56  | 57 | 58 | 59 | 60  | 61 | 62 | 63 |
|     | 36  | 37 | 38 | 39 | 40  | 41 | 42 | 43 | 44  | 45 | 46 | 47 | 48  | 49 | 50 | 51 | 52  | 53 | 54 | 55 | 56  | 57 | 58 | 59 | 60  | 61 | 62 | 63 | 64  | 65 | 66 | 67 |

A 670x450 grid of small images showing a sequence of patterns. The columns are labeled 390, 400, 410, 420, 430, 440, and 450. The rows are labeled 670 on the left. The patterns consist of small black and white squares arranged in various configurations, with some cells containing a diamond shape.