## Ionic Number Systems (ROUGH DRAFT)

The Ionic (or Melesian or Greek Alphabetic) Number System is based on the values listed in the following table.

| Numeral | Value | Name | Numeral | Value | Name | Numeral | Value | Name |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\alpha$ | 1 |  | 1 | 10 |  | $\rho$ | 100 |  |
| $\beta$ | 2 |  | K | 20 |  | $\sigma$ | 200 |  |
| $\gamma$ | 3 |  | $\lambda$ | 30 |  | T | 300 |  |
| $\delta$ | 4 |  | $\mu$ | 40 |  | v | 400 |  |
| $\varepsilon$ | 5 |  | $v$ | 50 |  | $\varphi$ | 500 |  |
| F (later $\varsigma$ ) | 6 | digamma | $\xi$ | 60 |  | $\chi$ | 600 |  |
| $\zeta$ | 7 |  | o | 70 |  | $\psi$ | 700 |  |
| $\eta$ | 8 |  | $\pi$ | 80 |  | $\omega$ | 800 |  |
| $\theta$ | 9 |  | P (or ヶ) | 90 | koppa | $\lambda$ (once M) | 900 | san (or sampi) |

Example $\omega \xi_{\mathrm{F}}$ has value 866.
For multiples of 1000 , just use $\alpha$ to $\theta$ with a mark before it (often on the lower left). So $\gamma$ signifies 3000 .
For example, , $\varepsilon \tau \rho \beta$ has value 5392.
These numbers are still used in modern Greece in the same way we still use Roman numbers.
Digamma $F$ is the original letter used for 6 . It has been replaced by stigma $\varsigma$ (which is in origin a combination of $\sigma$ and $\tau$ ).
San was the original name for the letter signifying 900. In the archaic Greek alphabet, san preceded koppa.
This system is sometimes called the Milesian system or the alphabetic system.
Until late antiquity, the Ionic number system actually used upper-case letters only. (The lower-case letters did not exist until late antiquity). This is illustrated in the next table.

| Numeral | Value | Numeral | Value | Numeral | Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 1 | I | 10 | P | 100 |
| B | 2 | K | 20 | $\Sigma$ | 200 |
| $\Gamma$ | 3 | $\Lambda$ | 30 | T | 300 |
| $\Delta$ | 4 | M | 40 | Y | 400 |
| E | 5 | N | 50 | $\Phi$ | 500 |
| F later ( S ) | 6 | $\Xi$ | 60 | X | 600 |
| Z | 7 | O | 70 | $\Psi$ | 700 |
| H | 8 | $\Pi$ | 80 | $\Omega$ | 800 |
| $\Theta$ | 9 | Q (or 4) | 90 | $\uparrow$ | 900 |

For example, , $\mathrm{A} \Psi \Xi \Delta$ has value 1764.
For example, KZ has value 27.
For example, ,ГTQF has value 3396.

