#### PROPOSAL SUMMARY FORM

rev of L2/02-318R

#### A. Administrative

1. Title:

Proposal for encoding Greek numerical characters in the UCS

2. Requester's name:

Thesaurus Linguae Graecae Project (University of California, Irvine)

3. Requester type:

Expert contribution

4. Submission date:

2003-02-28

- 5. Requester's reference
- 6. Completion

This is a complete proposal.

#### **B.** Technical - General

#### 1a. The proposal is for addition of character(s) to a new block:

Name of the block:

**Ancient Greek Numerical Characters** 

2. Number of characters in proposal:

73

3. Proposed category

Category C

4. Proposed Level of Implementation (1, 2 or 3):

Level 1

5a. Character names provided?

Yes.

5b. Character names in accordance with guidelines

Yes

5c. Character shapes reviewable?

Yes

6a. Who will provide the appropriate computerized font for publishing the standard?

TLG Project and David Perry

6b. Fonts currently available.

Yes.

6c. Font format

True Type

7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes

7b. Are published examples of use of proposed characters attached?

Yes.

8. Does the proposal address other aspects of character data processing?

No.

#### C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?

No.

2. Has contact been made to members of the user community?

Yes. The TLG has been in contact with experts in the field of Classics. Earlier versions of this proposal have been posted online and received comments by members of the profession. Proposal was reviewed by Dr. John Mansfield, Cornell University, Professor Jeffrey Rusten, Cornell University, Professor Roger Bagnall, Columbia University and Dr. Deborah Anderson, UC Berkeley.

3. Information on the user community for the proposed characters

Scholarly community.

4. The context of use for the proposed characters (type of use; common or rare)

Use varies.

5. Are the proposed characters in current use by the user community?

Yes. Characters are present primarily in ancient papyri and inscriptions and their modern editions. Used extensively by scholars of Greek.

6. After giving due considerations to the principles in *Principles and Procedures document*, must the proposed characters be entirely in the BMP?

No.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

Yes.

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

A few characters are similar but not identical.

11a. Does the proposal include use of combining characters and/or use of composite sequences

No.

12. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

13. Does the proposal contain any Ideographic compatibility character(s)?

No.

### Introduction

Ancient Greeks used primarily alphabetic characters to represent numbers. A number of non-alphabetic symbols were also used and those are not currently present in the Unicode Standard. This proposal contains 73 Greek Numerical (non-alphabetic) characters. A transcribed papyrus which utilizes many of the characters proposed is appended to the end of this document.

Numerical characters appear in a large number of ancient sources (papyri and inscriptions). They are the standard symbols used for the representation of numbers, fractions, weights and measures and have consistently been used in modern editions of Greek papyri and inscriptions as well as various publications related to the study and interpretation of ancient documents. The proposed characters are already present in existing non-Unicode Greek fonts and used consistently by the scholarly community.

The proposed characters fall into 2 categories:

- 1. Standard Ancient Greek Numerical Symbols and
- 2. Ancient Greek Acrophonic Numerals

The property for all characters is "Number, other" (No).

# 1. Standard Ancient Greek Numerical Symbols

#### **Fractions**

Name		Unicode	Glyph Variants, Notes, and Examples
Greek Half Symbol	_		Glyph variants: ∠, C, ∨, E, ¬, s, s, s, L and C \(^{\prime}\). 2220 is identical to one glyph variant, however this character has mathematical properties. Example: Kenyon 2.10
Greek Two-Thirds Symbol	(Q)		Example: Hultsch 1.154
Greek Three-Quarters Symbol	В		Example: Kenyon 1.143

#### Weights, Measures and Money: Standard Greek Measure of Time

Greek Year Symbol		May also be used as number signifier, half (but not in texts with Greek Half Symbol) or Drachma (but not in texts with Greek Drachma Symbol). Very commonly appears in texts with Greek Half Symbol and Greek Drachma Symbol, therefore not a glyph variant.  Example: Kenyon 2.122
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### Weights, Measures and Money: Standard Greek Weights and Money<sup>1</sup>

The ancient Greeks had two systems of measurement: one for wet, and one for dry products. The *kotyle*, which is the basic measure in both wet and dry systems, is made up of six *kyathoi* or four *oxybapha*. Its value is different depending on local variations, but it is roughly 1/41.<sup>2</sup>

Greek Talent Symbol	~		Glyph variants: C and 22BC and 2305 are similar to , however these two characters have mathematical properties. 1 Talent is c.25.75kg and 6,000 Drachmas. Example: Bilabel 2315
Greek Large Stater Symbol	Σ	03A3	1 Large Stater is c. 860g and 200 Drachmas
Greek Mna	-	-	No standard Character. 1 Mna is <i>c</i> . 430g and 100 Drachmas.
Greek Small Stater Symbol	Σ	03A3	1 Small Stater is c. 8.6g and 2 Drachmas
Greek Drachma Symbol	⋖		Glyph variants: $<$ , $\land$ . 22D6, 003C and 039B are similar to three of the glyph variants; however 22D6 has mathematical properties. 1 Drachma is $c$ .4.3g. Example: Heiberg 2.29

<sup>&</sup>lt;sup>1</sup> Ancient Greeks used the same terminology for weights and currency. Many local variations existed but the Attic-Euboic system appears to have been dominant and this is the system presented in the table below.

<sup>&</sup>lt;sup>2</sup> Pryce, F.N., Lang, M.L. & Vickers, M. in OCD<sup>3</sup> (1996) 943

Greek Obol Symbol	~	Glyph variants: ~, ~ and \. Kenyon also records a fourth:  (Kenyon 1974: 129)  007E, 223D, 005C and 2013 are similar to four out of the five glyph variants; however, 223D has mathematical properties.  1 Obol is c. 0.7g and one sixth of a Drachma.  Example: Hultsch 1.220
Greek Two Obols Symbol	<b>%</b>	Glyph variants: ≒, ≈ , =.  2248 is similar to one glyph variant, however, this character has mathematical properties.  Example: Hultsch 1.226
Greek Three Obols Symbol	(	Glyph variants: Γ, ſ, f, T and ∿ (Bilabel 1923:2308, 2314) 0393, 03A4 and 223F are similar to three glyph variants, however, 223F has mathematical properties. Example: Kenyon 1.142
Greek Four Obols Symbol	F	Example: Kenyon 1.142
Greek Five Obols Symbol	$\in$	Example: Kenyon 1.142

### Weights, Measures and Money: Standard Greek Measures of Capacity

Greek Metretes Symbol	F		This is a liquid measure.  1 Metretes is <i>c</i> . 351 and 144 liquid Kotyles.  Example: Kenyon 1.153
Greek Chous Symbol	χ°	03C7 <superscript> 03BF</superscript>	This is a liquid measure. 1 Chous is <i>c</i> .31 and 12 liquid Kotyles.
Greek Hemichous Symbol	ı	-	This is a liquid measure.  1 Hemichous is <i>c</i> .1.5l and 12 liquid Kotyles.
Greek Medimnos Symbol	ı	-	This is a dry measure.  1 Medimnos is <i>c</i> . 180l and 768 dry Kotyles.
Greek Hekteus Symbol	-	-	This is a dry measure.  1 Hekteus is <i>c</i> . 301 and 128 dry Kotyles.
Greek Choinix Symbol	-	-	This is a dry measure. 1 Choinix is <i>c</i> . 11 and 4 dry Kotyles
Greek Kotyle Symbol	K°	See note	Formed with Greek Kyathos Base Symbol + <superscript> 03BF This is both a liquid and a dry measure. 1 Kotyle is <i>c</i>. 250ml.</superscript>
Greek Oxybaphon Symbol	-	-	This is both a liquid and a dry measure.  1 Oxybaphon is <i>c</i> . 60ml and ½ Kotyle.
Greek Kyathos Base Symbol	K		Often written with $\langle \text{superscript} \rangle 03\text{C5}$ after it. This is a dry measure. 1 Kyathos is $c$ . 40ml and $^{1}/_{6}$ Kotyle. Example: Hultsch 1.218

### Weights, Measures and Money: Greek Characters for Roman Weights and Measures

Three Greek characters were used to represent weights (and occasionally measures) in the Roman system. The Roman system is based on the Libra or As, of 327.45g. This is divided into 12 Unciae. The Greek translations for these terms are Litra for Libra, and Ounkia<sup>3</sup> for Uncia.

Greek Litra Symbol	s	Glyph variant: 7. Example: Raeder 1.152
Greek Ounkia Symbol	$\mathbf{I}_{0}$	Example: Hultsch 1.220
Greek Xestes Symbol	άm	Glyph variants: $\xi$ , $\xi$ , $\omega$ , $+$ , $\xi$ , $\xi$ , $\gamma$ , $\gamma$ , $\gamma$ , $\gamma$ , $\gamma$ .  Example: Hultsch 1.228

<sup>&</sup>lt;sup>3</sup> Also *Onkia*. See LSJ 1268

# Weights, Measures and Money: Greek Characters for non-Graeco-Roman Measures

Greek Artabe Symbol	0-0	Other glyph variants: <, \(\frac{1}{2}\), \(\bullet{\pi}\), \(\bullet{\pi}\), \(\bullet{\pi}\), \(\bullet{\pi}\) and \(\bullet{\pi}\).  Notes: 00F7 is similar to one glyph variant.  Example: Kenyon 2.142
Greek Aroura Symbol	5	Example: Kenyon 1.143

### Weights, Measures and Money: Ancient Greek Medical Measures

Greek Gramma Symbol	$\Gamma_{b}$	Example: Hultsch.1.220
Greek Tryblion Base Symbol	Ь	Example: Hultsch.1.221

## 2. Ancient Greek Acrophonic Numerals

#### Introduction

In addition to the alphabetic numerical system, ancient Greeks also used a series of characters known as the acrophonic numerals.<sup>4</sup> Acrophonic numerals are found primarily in ancient Greek inscriptions in Athens and other city states.<sup>5</sup> The Attic system (Attica is the greater geographic area which includes the city of Athens) is the most common and well-documented. A transcribed inscription from Athens (ca. 451/0 BC) showing a number of acrophonic numerals is appended at the end of this document.<sup>6</sup>

The table *Complete Outline of Ancient Greek Acrophonic Numerals* below shows all 76 characters required to represent acrophonic numerals in Unicode. Twenty-one of these characters already exist in the Unicode standard. The proposal includes the characters needed for the encoding of the *Attic* acrophonic system, namely characters used in Athens and the surrounding area (Attica) and non-Attic characters which cannot be considered as glyph variants of Attic.

<sup>&</sup>lt;sup>4</sup> The name 'acrophonic' from the Greek word "akron" which means 'extreme' or 'farthest point.' The term implies that the initial letter of the word by which the number is called, represents the number itself. E.g.  $\Delta$  (=10) is used for ΔEKA, the Greek word for 'ten.'

<sup>&</sup>lt;sup>5</sup> Heath & Toomer (1996) 1052

<sup>&</sup>lt;sup>6</sup> Hiller von Gaertringen, F., Inscriptiones Graecae I Editio Minor (Berlin, 1924) 83

# **Complete Outline of Ancient Greek Acrophonic Numerals**

			Additional Character Names, Glyph Variants, Notes,
Name		Unicode	Examples
Attic Acrophonic <sup>1</sup> / <sub>12</sub> Unit	/	002F	• Attic Acrophonic <sup>1</sup> / <sub>12</sub> Obol Example: <i>IG</i> ( <i>Inscriptiones Graecae</i> ) I.43
Attic Acrophonic 1 Chalkous	X	03A7	Attic Acrophonic <sup>1</sup> / <sub>8</sub> Unit     Attic Acrophonic <sup>1</sup> / <sub>8</sub> Obol     Attic Acrophonic 1,000 Units     Attic Acrophonic 1,000 Drachmas     Cyrenaic Acrophonic 20 Drachmas     Example: <i>IG</i> 1.85
Attic Acrophonic 1/4 Unit	)		• Attic Acrophonic <sup>1</sup> / <sub>4</sub> Obol Example: <i>IG</i> I.151
Attic Acrophonic <sup>1</sup> / <sub>2</sub> Unit	C		• Attic Acrophonic <sup>1</sup> / <sub>2</sub> Obol     • Troezenian Acrophonic 1 Drachma     Example: <i>IG</i> I.151
Attic Acrophonic 1 Unit	I	0399	Attic Acrophonic 1 Obol     Troezenian Acrophonic <sup>1</sup> / <sub>4</sub> Unit     Orchomenus, Carystus Acrophonic 1 Drachma     Example: <i>IG</i> I.82
Attic Acrophonic 1 Drachma	⊢		Example: IG I.82
Attic Acrophonic 5 Units	Г		Attic Acrophonic 5 Drachmas     Heraeum Acrophonic 1 Plethron     Epidauran Acrophonic 5 Chalkoi     Argive, Heraeum, Epidauran, Troezenian Acrophonic 50 Units     Cyrenaic Acrophonic 5 Mnas     Example: <i>IG</i> I.82
Attic Acrophonic 10 Units	Δ	0394	• Attic Acrophonic 10 Drachmas     • Thespian Acrophonic 1 Drachma (▷)     • Orchomenian Acrophonic 10 Drachmas (▷)     • Cyrenaic Acrophonic ¹/₅₀ Drachma Example: IG 1.82
Attic Acrophonic 50 Units	A'		• Attic Acrophonic 50 Drachmas  Glyph variants:  Naxos:  Example: IG I.82
Attic Acrophonic 100 Units	Н	0397	• Attic Acrophonic 100 Drachmas     • Thespian, Orchomenian Acrophonic ¹/₂ Unit Glyph variants:     Argos, Nemea, Epidaurus, Troezen: ☐ (archaic glyph variant)     Example: IG I.82
Attic Acrophonic 500 Units	P		• Attic Acrophonic 500 Drachmas  Glyph variants:  Epidaurus: □  Cos: □  Example: IG I.83
Attic Acrophonic 5,000 Units	P		• Attic Acrophonic 5,000 Drachmas Example: IG 1.83
Attic Acrophonic 10,000 Units	М	039C	Attic Acrophonic 10,000 Drachmas     Attic Acrophonic 1 Mna     Example: IG 1.170
Attic Acrophonic 50,000 Units	MI		Attic Acrophonic 50,000 Drachmas     Attic Acrophonic 5 Mnas     Example: IG I.170
Attic Acrophonic 1 Talent	Т	03A4	<ul> <li>Epidauran, Hermionian, Tegean, Delphi Acrophonic <sup>1</sup>/<sub>4</sub> Unit</li> <li>Thespian, Naxan, Andanian Acrophonic 3 Units</li> <li>Example: <i>IG</i> I.132</li> </ul>
Attic Acrophonic 5 Talents	T		Example: IG I.130

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Attic Acrophonic 10 Talents	<b>A</b>		Example: IG I.130
Attic Acrophonic 50 Talents	<b>₽</b> '		Example: IG I.132
Attic Acrophonic 100 Talents	Н		Example: IG I.130
Attic Acrophonic 500 Talents	H		Example: IG I.152
Attic Acrophonic 1,000 Talents	X		Example: IG I.152
Attic Acrophonic 5,000 Talents	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Example: IG I <sup>2</sup> .342
Attic Acrophonic 1 Stater		03A3	Epidauran Acrophonic 1 Chalkous
Trees   Terrophionic   States	Σ	00110	Glyph Variants:
	~		Thespiae: 5
			Example: IG I.135
Attic Acrophonic 5 Staters	Į.		Example: IG I.163
Attic Acrophonic 10 Staters	Ţ		Example: IG I.163
Attic Acrophonic 50 Staters	Δ Σ		Example: IG I.163
Attic Acrophonic 100 Staters	Σ		Example: IG I <sup>2</sup> .347
Attic Acrophonic 500 Staters	Ę		Example: IG I <sup>2</sup> .347
Attic Acrophonic 1,000 Staters	X		Example: IG I <sup>2</sup> .347
Attic Acrophonic 10,000 Staters	M		Example: IG I <sup>2</sup> .347
Attic Acrophonic 50,000 Staters	M E		Example: IG I <sup>2</sup> .347
Attic Acrophonic 10 Mnas			Thespian Acrophonic 10,000 Units
Attic Acrophonic to Winas			Glyph Variants:
	Â		Tegea: 🛆
	M		Messene:
			Andania, Stratus: Ã
			Example: <i>IG</i> I.163
Heraeum Acrophonic 1	_		Epidauran Acrophonic 5 Units
Plethron	П		Example: IG IV.336
Andanian Acrophonic 1	K	039A	Example: <i>IG</i> V.1.#1532
Kollybos	' \		
Troezenian Acrophonic <sup>1</sup> / <sub>8</sub>		25EF	Thespian, Orchomenian, Carystian Acrophonic 1 Unit
Unit	0		Argos Acrophonic 10 Units
			Example: IG 4.162
Andanian Acrophonic <sup>1</sup> / <sub>4</sub> Unit		003E	• Cyrenaic Acrophonic <sup>1</sup> / <sub>5</sub> Drachma
	>		Cyrenaic Acrophonic 10 Mnas  Franchise Acrophonic 14 Mnas  The state of Assistance of Assistanc
			Example: properly a glyph variant of Attic Acrophonic <sup>1</sup> / <sub>4</sub> Unit. See.
Andanian Acrophonic <sup>1</sup> / <sub>2</sub> Unit		003C	IG V.2.11  • Also found in Epidaurus, and Thespiae
Amuanian Acrophonic /2 Unit		0030	Also found in Epidadrus, and Thespiae     Tegean Acrophonic 1 Drachma
	<		Example: properly a glyph variant of Attic Acrophonic <sup>1</sup> / <sub>2</sub> Unit See
			IG V.1.#1532
Naxian Acrophonic 1/2 Unit	Γ	0393	Example: IG V.2.11
Tegean Acrophonic 1/2 Unit	Е	0395	Example: IG V.2.11
Troezenian Acrophonic <sup>1</sup> / <sub>2</sub>	٦	1D215	Carystian, Acrophonic 100 Units
Unit	1		Example: <i>IG</i> 4.162
Nemean Acrophonic <sup>1</sup> / <sub>2</sub> Unit	_	039E	Note: Archaic glyph variant of 039E.
, -	Ξ		Example: IG IV.67

A • A 1 • 4 TI •	1	10110	Also found at Names and Transport
Argive Acrophonic 1 Unit		10110	Also found at Nemea and Troezen     Hermionian Acrophonic <sup>1</sup> / <sub>2</sub> Unit
			Herimonian Acrophonic 7 <sub>2</sub> Unit     Heraeum, Troezenian, Carystian Acrophonic 10 Units
			• Cyrenaic Acrophonic <sup>1</sup> / <sub>10</sub> Drachma
			• Cyrenaic Acrophonic 1 Mna
			Example: IG 4.162
Argive Acrophonic 1 Unit		00B7	Also found at Heraeum and Nemea
angive nerophome reme	•	0027	Example: IG IV.316
Thespian Acrophonic 1 Unit			Example: IG VII.301
	$\rightarrow$		
Hermionian Acrophonic 1 Unit			Example: IG IV.137
_	P		
Epidaurean Acrophonic 2			<i>Note</i> : Not same as 003A. Top dot level with top of uppercase letters.
Units	•		Design to match 00B7.
	•		Example: IG IV.316
Epidaurean Acrophonic 3		See note	Note: Accepted by UTC as part of extended Greek punctuation. No
Units	:		codepoint yet assigned. Design to match 00B7.
			Example: IG IV.316
Thespian Acrophonic 2 Units	_		Example: IG IV.299
	>		
Cyrenaic Acrophonic 1	Ζ	0396	Cyrenaic Acrophonic 50 Mnas
Drachma	_		Example: Tod (1936-7) 257
Cyrenaic 2 Drachmas Symbol	_		Cyrenaic Acrophonic 100 Mnas
	L		Example: Tod (1936-7) 257
Epidaurean Acrophonic 2			<i>Note</i> : Top line level with top of uppercase letters.
Drachmas	_		Example: IG IV.316
Epidaurean Acrophonic 3		10112	<i>Note</i> : Top line level with top of uppercase letters.
Drachmas	Ξ		Example: IG IV.162
Troezenian Acrophonic 5			Also found at Tegea
Units			Example: <i>IG</i> 4.163
Argive Acrophonic 10 Units		2609	Also found at Nemea and Heraeum
and the second second	$\odot$		Example: IG IV.79
Troezenian Acrophonic 10			Cyrenaic Acrophonic 4 Drachmas
Units	>		Cyrenaic Acrophonic 200 Mnas
	>		Example: <i>IG</i> 4.162
Troezenian Acrophonic 10			Example: IG IV.176
Units	X		Notes: Not glyph variant of Troezenian Acrophonic 10 Units/
	Δ		Cyrenaic Acrophonic 4 Drachmas above
Hermionian Acrophonic 10			Example: IG IV.137
Units	$\Lambda$		P 1 101111 2000
Messenian Acrophonic 10	<b>✓</b>		Example: IG V.1.2.288
Units	1		
Thespian Acrophonic 10 Units	_		Example: IG VII.301
	Ð		11.6.1.0.1
Thespian Acrophonic 30 Units			• Also found at Orchomenus
	_		Glyph Variants: Thespiae: →, ▼, ▼, ▼, ▼
	$\overline{\mathcal{D}}$		Orchomenus: F
			Example: IG VII.299
Troezenian Acrophonic 50			Epidauran Acrophonic 500 Units
Units	T		Example: IG IV.337
Onics			1
Troezenian Acrophonic 50			Example: <i>IG</i> 4.163
Units	3		Notes: Not glyph variant of Troezenian Acrophonic 50 Units/
	I		Epidauran Acrophonic 500 Units above.
Hermionian Acrophonic 50			Example: IG IV.136
Units	7		
Thespian Acrophonic 50 Units			Also found at Orchomenus
	Æ		Example: IG VII.300

Thespian Acrophonic 100		Also found at Orchomenus
Units	Æ	Example: IG VII.304
Thespian Acrophonic 300		Example: IG VII.300
Units	Æ	
Epidaurean Acrophonic 500		Example: IG IV.335
Units	凸	
Troezenian Acrophonic 500		Example: <i>IG</i> 4.165
Units	П	
Thespian Acrophonic 500		Also found at Orchomenus
Units		Glyph Variants:
	l THE	• Thespiae: $\Pi E$ , $\Gamma E$
		Example: IG VII.299
Carystian Acrophonic 500		Example: Tod (1911-12) 113
Units	ਨਿ	
Naxian Acrophonic 500 Units		IG XII.supp.104
-	Ħ	
Thespian Acrophonic 1,000	.1.	Also found at Orchomenus
Units	\( \)	Example: IG VII.299
Thespian Acrophonic 5,000		Also found at Orchomenus
Units	<b>T</b>	Example: IG VII.575
Delphic Acrophonic 5 Mnas		Example: <i>IG</i> V.1.2.288
	Πĺ	
Stratian Acrophonic 50 Mnas	Ä	Example: IG IX.1.2.41
•	Δ'	

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### TABLE xx01-3F: GREEK NUMERICAL CHARACTERS

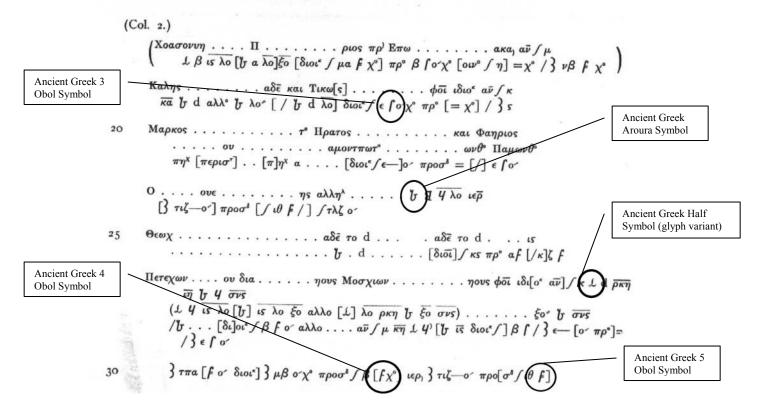
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### TABLE xx01-3F: GREEK NUMERICAL CHARACTERS

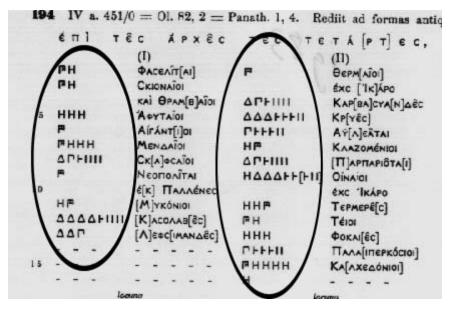
hex	Name		
xx00	ANCIENT GREEK HALF SIGN		
xx01	ANCIENT GREEK TWO-THIRDS SIGN		
xx02 xx03	ANCIENT GREEK THREE-QUARTERS SIGN ANCIENT GREEK YEAR SIGN		
xx04	ANCIENT GREEK TALENT SIGN		
xx05	ANCIENT GREEK DRACHMA SIGN		
xx06	ANCIENT GREEK OBOL SIGN		
xx07 xx08	ANCIENT GREEK TWO OBOLS SIGN ANCIENT GREEK THREE OBOLS SIGN		
xx09	ANCIENT GREEK FOUR OBOLS SIGN		
xx0A	ANCIENT GREEK FIVE OBOLS SIGN		
xx0B	ANCIENT GREEK METRETES SIGN ANCIENT GREEK KYATHOS BASE SIGN		
xx0C xx0D	ANCIENT GREEK LITRA SIGN		
xx0E	ANCIENT GREEK OUNKIA SIGN		
xx0F	ANCIENT GREEK XESTES SIGN		
xx10 xx11	ANCIENT GREEK ARTABE SIGN ANCIENT GREEK AROURA SIGN		
xx12	ANCIENT GREEK GRAMMA SIGN		
xx13	ANCIENT GREEK TRYBLION BASE SIGN		
xx14 xx15	ATTIC ACROPHONIC 1/4 UNIT ATTIC ACROPHONIC 1/2 UNIT		
xx16	ATTIC ACROPHONIC 1 DRACHMA		
xx17	ATTIC ACROPHONIC 5 UNITS		
xx18 xx19	ATTIC ACROPHONIC 50 UNITS ATTIC ACROPHONIC 500 UNITS		
xx1A	ATTIC ACROPHONIC 5,000 UNITS		
xx1B	ATTIC ACROPHONIC 50,000 UNITS		
xx1C xx1D	ATTIC ACROPHONIC 5 TALENTS ATTIC ACROPHONIC 10 TALENTS		
xx1E	ATTIC ACROPHONIC 10 TALENTS  ATTIC ACROPHONIC 50 TALENTS		
xx1F	ATTIC ACROPHONIC 100 TALENTS		
xx20 xx21	ATTIC ACROPHONIC 500 TALENTS		
xx21 xx22	ATTIC ACROPHONIC 1,000 TALENTS ATTIC ACROPHONIC 5,000 TALENTS		
xx23	ATTIC ACROPHONIC 5 STATERS		
xx24 xx25	ATTIC ACROPHONIC 10 STATERS ATTIC ACROPHONIC 50 STATERS		
xx26	ATTIC ACROPHONIC 30 STATERS		
xx27	ATTIC ACROPHONIC 500 STATERS		
xx28 xx29	ATTIC ACROPHONIC 1,000 STATERS ATTIC ACROPHONIC 10,000 STATERS		
xx2A	ATTIC ACROPHONIC 50,000 STATERS		
xx2B	ATTIC ACROPHONIC 10 MNAS		
xx2C xx2D	HERAEUM ACROPHONIC 1 PLETHRON THESPIAN ACROPHONIC 1 UNIT		
xx2E	HERMIONE ACROPHONIC 1 UNIT		
xx2F	EPIDAUREAN ACROPHONIC 2 UNITS		
xx30 xx31	THESPIAN ACROPHONIC 2 UNITS CYRENAIC ACROPHONIC 2 DRACHMAS		
xx32	EPIDAUREAN ACROPHONIC 2 DRACHMAS		
xx33	TROEZENIAN ACROPHONIC 5 UNITS		
xx34 xx35	TROEZENIAN ACROPHONIC 10 UNITS 1 TROEZENIAN ACROPHONIC 10 UNITS 2		
xx36	HERMIONIAN ACROPHONIC 10 UNITS		
xx37	MESSENIAN ACROPHONIC 10 UNITS		
xx38 xx39	THESPIAN ACROPHONIC 10 UNITS THESPIAN ACROPHONIC 30 UNITS		
xx3A	TROEZENIAN ACROPHONIC 50 UNITS 1		
xx3B	TROEZENIAN ACROPHONIC 50 UNITS 2		
xx3C xx3D	HERMIONIAN ACROPHONIC 50 UNITS THESPIAN ACROPHONIC 50 UNITS		
xx3E	THESPIAN ACROPHONIC 100 UNITS		
xx3F	THESPIAN ACROPHONIC 300 UNITS		
xx40 xx41	EPIDAUREAN ACROPHONIC 500 UNITS TROEZENIAN ACROPHONIC 500 UNITS		
xx42	THESPIAN ACROPHONIC 500 UNITS		
xx43	CARYSTIAN ACROPHONIC 500 UNITS		
xx44 xx45	NAXIAN ACROPHONIC 500 UNITS THESPIAN ACROPHONIC 1,000 UNITS		
xx46	THESPIAN ACROPHONIC 5,000 UNITS		
xx47	DELPHIC ACROPHONIC 5 MNAS		
xx48	STRATIAN ACROPHONIC 50 MNAS		

# **Appendix**

Example of standard ancient Greek numerical symbols.<sup>7</sup>



Example of Ancient Greek Acrophonic numbers.8



<sup>&</sup>lt;sup>7</sup> Kenyon, F.G., Greek *Papyri in the British Museum* I (London, 1893) 143. Characters found in this image but not in the table below are glyph variants of existing Greek letters or characters proposed below.

<sup>&</sup>lt;sup>8</sup> Hiller von Gaertringen, F., Inscriptiones Graecae I Editio Minor (Berlin, 1924) 83