

Proposals for Unicode Consortium

L2/05-318

During the development of the *E-document scientific multilingual processing* Project, some characters missing from the Unicode Standard have needed. Some proposals to encode such characters are prepared.

The most up-to-date versions are posted below. Earlier versions of the proposals are also linked to this page for archival purposes.

Each proposal has an restricted version (introduction, bibliography, and list of characters proposed) which is the version to be submitted to Unicode Consortium, and a completed version containing documentation and examples of use for each character.

Proposals:

- Arabic Mathematical Alphabetic Symbols:

Version	Date	Status	Summary Form	Complete
1	13/11/2004	Discussed		amas11.pdf
2	16/11/2004	Discussed		amas21.pdf
3	17/11/2004	Formal submitted		amas31.pdf
4	16/12/2004	Formal submitted	amassf.doc	amas41.pdf
5	09/07/2005	Submitted	amassf1.doc	amas51.pdf

-Mathematical Symbols

Version	Date	Status	Summary Form	Complete
1	16/11/2004	Discussed		ms11.pdf
2	16/12/2004	Formal submitted		ms21.pdf
3	09/07/2005	Submitted		ms31.pdf

- Arabic Mathematical Diverse Symbols:

Version	Date	Status	Summary Form	Complete
1	16/11/2004	Discussed		amds11.pdf
2	19/11/2004	Discussed		amds21.pdf
3	16/12/2004	Formal submitted	amdssf.doc	amds31.pdf
4	09/07/2005	Submitted	amdssf1.doc	amds41.pdf

- Arabic Mathematical Old Symbols:

Version	Date	Status	Summary Form	Complete
1	13/11/2004	Discussed		amos11.pdf
2	16/12/2004	Formal submitted	amossf.doc	amos21.pdf
3	09/07/2005	Submitted	amossf1.doc	amos31.pdf

Tools:

- RamzArab:

- + Font in OpenType format: [ramzarab.ttf](#)
- + Package for LaTeX: [ramzarab1_3.zip](#)
- + Table of characters: [tabramzarab.pdf](#)

- Rwmy:

- + Font in OpenType format: [rwmy.ttf](#)
- + Package for LaTeX: [rwmy1_1.zip](#)
- + Table of characters: [tabrwmy.pdf](#)

- AntiSym:

- + Package for LaTeX: [antisym1_2.zip](#)
- + Table of characters: [tabantisym.pdf](#)

- Samples:

- + Some problems in handbooks: [pbbook.zip](#)
- + Arabic mathematical handbooks samples: [handbook.zip](#)
- + Arabic mathematical symbols adopts in The Amman's 1987 convention: [convention.zip](#)
- + Arabic mathematical old manuscripts samples: [oldbook.zip](#)
- + Documents samples composed with RyDArab for LaTeX: [echantp.pdf](#)
- + Example of mathematical expression composed with [RyDArab](#):

English model	French model
$f(x) = \begin{cases} \sum_{i=1}^x x^i & \text{if } x < 0 \\ \int_1^x x^i dx & \text{if } x \in \mathbb{S} \\ \tan \pi & \text{otherwise with } \pi = 3,141 \end{cases}$	$f(x) = \begin{cases} \sum_{i=1}^x x^i & \text{si } x < 0 \\ \int_1^x x^i dx & \text{si } x \in \mathbb{E} \\ \text{tg } \pi & \text{sinon avec } \pi = 3,141 \end{cases}$

Moroccan model
$f(x) = \begin{cases} \sum_{i=1}^x x^i & \text{إذا كان } x < 0 \\ \int_1^x x^i dx & \text{إذا كان } x \in \mathbb{E} \\ \text{tg } \pi & \text{غير ذلك مع } \pi = 3,141 \end{cases}$

Western Arabic model	Eastern Arabic model
$\left. \begin{array}{l} \text{إذا كان } x > 0 \\ \text{إذا كان } x \in \mathbb{M} \\ \text{غير ذلك مع } \pi = 3,141 \end{array} \right\} = \text{دبر}$	$\left. \begin{array}{l} \text{إذا كان } x > 0 \\ \text{إذا كان } x \in \mathbb{M} \\ \text{غير ذلك مع } \pi = 3,141 \end{array} \right\} = \text{ت (بر)}$

Bibliography:

- Mohamed Jamel Eddine Benatia, Azzeddine Lazrek and Khalid Sami, [Arabic mathematics in Unicode, Internationalization and Unicode Conference \(IUC\), IUT 27, Berlin, Germany, April 6-8, 2005](#)

- Conventions, Manuscripts and Handbooks: [bibliocoh.htm](#) - [samples.pdf](#)
- Some posting about “MathML in Arabic” are presented on the W3C public mailing list for MathML in: <http://lists.w3.org/Archives/Public/www-math>
- W3C Note for MathML in Arabic by Math Interest Group in: [MathML in Arabic](#)

Acknowledgements:

Patrick Andries, Asmus Freytag, Murray Sargent, François Yergeau,
Fayez Alhargan, Miikka-Markus Alhonen,
Mostafa Banouni, Mohamed Jamel Eddine Benatia, Mustapha Eddahibi, Mohamed Elyaakoubi, Khalid Sami.

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This page was last updated: 09/07/2005