MathML
or math in general
ConTeXt Meeting 2011
Some developments

MathML started as an interchange format on the one hand (content) but also provides a rendering variant (presentation) and in the meantime has been merged with what is called Open Math. We now have MathML 3 and ConTeXt has been updated a while ago to support this.
2 Some history

I we supported MathML right from the start

II in MkII quite some data juggling takes place because we need to do some analysis

III the MkII code has been upgraded a few times but is now frozen

IV in MkIV we have rewritten all code using the first version of the new XML parser

V it currently is a mixture of Lua, TeX and MetaPost

VI there will probably be a partial rewrite some day in the future
UNICODE

In the meantime Unicode has been extended with math special characters and symbols were accessed by entity but now we can exclusively use Unicode characters and forget about the entities no matter what, we do need to do some analysis on the content of (presentation) elements.
we still provide rendering options as there might be (cultural) differences

in both marks we just need to load the module

in MkIV you need a reasonable namespace directive

content markup can give better results than presentation markup
Consequences

I. We already use a database or definitions.

II. We won't go the (somewhat extreme) route of more commands.

III. We're working on a subsystem for field-driven rendering.

IV. Bidirectional math already works but will be integrated in the layout model.

V. Cultural specific solutions are possible (we already provide language specific functions).

VI. More information is carried around (for rendering as well as export), for instance functions.