The **babyloniannum** package

Raphaël Pinson
`raphink@gmail.com`

0.1 from 2011/08/17

☗ Introduction

This package can be used to typeset Babylonian numerals using X∃TEXor LuaTEX. It makes use of the Santakku Paleo-Babylonian font which can be downloaded at `http://www.hethport.uni-wuerzburg.de/cuneifont/`.

☗ Usage

`\babylonianfont`

Set the font used. Currently, only the Santakku font has been tested. Let me know if you get the package to work with other fonts.

Example usage: `\babyloninanfont{Santakku}`

`\babyloniannum`

This is the main macro of this package. It takes a number between 1 and 59 as argument and typesets it with Babylonian numerals.

Example usage: `\babyloninannum{32}`

`\babyloniandisp`

This macro lets you print Babylonian characters using their unicode reference. It is used by `\babyloniannum` to display Babylonian numbers.

Example usage: `\babyloninandisp{1230B}`

☗ Table of characters

Below is the full list of Babylonian characters this package can typeset:

1	❖	21	❖	41	❖
1	𒁹	21	𒌋𒁹	41	𒃻𒁹
2	𒈫	22	𒌋𒈫	42	𒃻𒈫
3	𒐈	23	𒌋𒐈	43	𒃻𒐈
4	𒐉	24	𒌋𒐉	44	𒃻𒐉
5	𒐊	25	𒌋𒐊	45	𒃻𒐊
6	𒐋	26	𒌋𒐋	46	𒃻𒐋
7	𒐌	27	𒌋𒐌	47	𒃻𒐌
8	𒐍	28	𒌋𒐍	48	𒃻𒐍
9	𒐎	29	𒌋𒐎	49	𒃻𒐎
10	𒌋	30	𒌍	50	𒑂
11	𒌋𒁹	31	𒌍𒁹	51	𒑂𒁹
12	𒌋𒈫	32	𒌍𒈫	52	𒑂𒈫
13	𒌋𒐈	33	𒌍𒐈	53	𒑂𒐈
14	𒌋𒐉	34	𒌍𒐉	54	𒑂𒐉
15	𒌋𒐊	35	𒌍𒐊	55	𒑂𒐊
16	𒌋𒐋	36	𒌍𒐋	56	𒑂𒐋
17	𒌋𒐌	37	𒌍𒐌	57	𒑂𒐌
18	𒌋𒐍	38	𒌍𒐍	58	𒑂𒐍
19	𒌋𒐎	39	𒌍𒐎	59	𒑂𒐎
20	𒎙	40	𒃻		

❖ Implementation

```
1 \ProvidesPackage{babyloniannum}
2 \RequirePackage{fontspec}
3 \RequirePackage{xunicode}
4 \RequirePackage{numname}
```

\babylonianfont

```
5 \newcommand{\babylonianfont}{Santakku}
```

\babyloniandisp

```
6 \newcommand{\babyloniandisp}[1]{%
7   \fontspec{\babylonianfont}{\char"#1}}
```

\babyloniannum

```
8 \newcommand{\babyloniannum}[1]{%
9 \numdigits{#1}%
10 \ifcase\c@xsm@mctr
11   \or
12   \babyloniandisp{1230B} %10
13   \or
14   \babyloniandisp{1230B}\kern-1.5pt{}\babyloniandisp{1230B} %20 -- unknown?
15   \or
16   \babyloniandisp{1230D} %30
17   \or
18   \babyloniandisp{1240F} %40
```

```
19   \or
20   \babyloniandisp{12410} %40
21 \fi
22 \kern-4pt{}%
23 \ifcase\c@ism@mctr
24   \or
25   \babyloniandisp{12079} %1
26   \or
27   \babyloniandisp{1222B} %2
28   \or
29   \babyloniandisp{12408} %3
30   \or
31   \babyloniandisp{120FB} %4
32   \or
33   \babyloniandisp{1240A} %5
34   \or
35   \babyloniandisp{1240B} %6
36   \or
37   \babyloniandisp{1240C} %7
38   \or
39   \babyloniandisp{1240D} %8
40   \or
41   \babyloniandisp{1240E} %9
42 \fi
43 }
```