hello.world.

1 User commands

```
\begin{array}{c} basic \\ 4 \\ 72.26999pt \\ 722.7pt \end{array}
```

2 Hooks

Before Begin stuff(outside). At Begin stuff(inside). Begin stuff. This is Stuff! At End stuff(inside). End stuff. After End stuff(outside).

Before Begin equation(outside). At Begin equation(inside).

$$a = b$$
 At End equation(inside). (1)

After End equation(outside).

Before Begin verbatim(outside).Begin verbatim(inside):Some Code.

```
\some \code
End verbatim(inside): Some Code.
```

After End verbatim(outside).

3 Author commands

3.1 Definitions

3.1.1 Macro definitions

```
path of PB
path of UF
path of UF
path of UF
orange= orange= orange orange
deftestone is defined . After undef, deftestone is undefined.
deftesttwo is defined . After csundef, deftesttwo is undefined.
deftesttwo is undefined. After csgundef, deftesttwo is undefined.
macro:-jorange
```

3.1.2 Arithmetic definitions

```
2 + 4 * 8 = 34

3 + 5 * 7 = 38

4 + 6 * 8 = 52

1pt + 2em = 21.00003pt
```

```
\begin{array}{l} 3pt+1em=13.00002pt\\ 4pt+0.5em=9.0pt\\ 10pt\ plus\ 2pt\ minus\ 3pt=10.0pt\ plus\ 2.0pt\ minus\ 3.0pt\\ 4pt\ minus\ 1pt=4.0pt\ minus\ 1.0pt\\ 5mu=5.0mu \end{array}
```

3.2 Expansion control

full expansion: macro:-¿first expand once: macro:-¿"lvltwo csexpandonce: macro:-¿"lvlone

3.3 Hook management

```
x; xAB; xABYZ.
ABxYZ.
xZ.
pre-x.
```

3.4 Patching

```
patching: ok
example patched here
relax is not patchable
begin is patchable
first and second
appending to paramacro: ok
first and second. Post
prepending to paramacro: ok
Pre. first and second. Post
```

3.5 Boolean Flags

boolvar is false.

set to true. boolvar is true.
set to false. boolvar is false.
set to true. boolvar is true.
set to false. boolvar is false.
ltxbool is false
set to true. ltxbool is true
set to false. ltxbool is false
set to true. ltxbool is true
set to false. ltxbool is false

3.6 Generic Tests

nosuchmacro is not a macro
relax is not a macro
begin is a macro
nobeginning is un defined.
begin is defined.
relax is not defparam
begin is defparam
apptocmd is defprotected
ifdefprotected is defprotected
relax is not defprotected
begin is not defprotected

3.7 List Processing

3.8 Miscellaneous Tools