

## 1 Testing Counters

Counter Foo [0] = 0.  
Increment Foo[1] = 1.  
Set Foo to 2 = 2.  
Add 10 to Foo [12] = 12.  
Double Foo [24] = 24.

## 2 Testing RefStep

Define bar to be reset within foo. Now (Foo,Bar)[24,0] is (24,0)  
Refstep bar: Now (Foo,Bar)[24,1] is (24,1)  
Refstep foo: Now (Foo,Bar)[25,0] is (25,0)

## 3 Number formatting

arabic[6] = 6  
roman [vi] = vi  
Roman [VI] = VI  
alph [f] = f  
Alph [F] = F  
fnsymbol [||] = ||  
How far will T<sub>E</sub>X go? Fubar is mmmmmmmmmcmxcix

## 4 TeX Counters

### 4.1 Integers

7 = 7.  
7 = 7.

### 4.2 Dimensions

HFuzz is 0.1pt. Now HFuzz is 2.0pt.  
HFuzz is 2.0pt. Now HFuzz is 2.0pt.  
Dimen 1.23pt = 1.23pt.  
Dimen 1.23pt = 1.23pt.  
Dimen 1.23pt = 1.23pt.  
count 2: 3\*65536 = 196608.  
Now dimen: 3pt = 3.0pt  
One em = 10.00002pt  
One ex = 4.30554pt  
Dimen: one ex = 4.30554pt  
Dimen: 1pt = 1.0pt

Dimen: 1pt = 1.0pt  
 8 pt = 8.0pt  
 15 pt = 15.0pt  
 Catcodes? 15.0 POINTS = 15.0 POINTS

### 4.3 Glue

1pt plus 3pt = 1.0pt plus 3.0pt  
 1pt plus 3fil = 1.0pt plus 3.0fil  
 1pt plus 3fill = 1.0pt plus 3.0fill  
 Skip: 2pt plus 3fill = 2.0pt plus 3.0fill  
 0.1pt plus 3fill = 0.1pt plus 3.0fill  
 Catcodes? 1.0 POINTS PLUS 3.0 POINTS = 1.0 POINTS PLUS 3.0  
 POINTS

### 4.4 Undefined?

Unknown count: 0 = 0  
 Unknown dimen: 0pt = 0.0pt  
 Unknown skip: 0pt = 0.0pt

### 4.5 The

the count 0 : 2  
 the two (countdef 2) : 196608  
 Tokens: abFOOcd = abFOOcd  
 Catcode: 11 = 11  
 Catcode: 12 = 12

### 4.6 New Count, etc

3 = 3

### 4.7 L<sup>A</sup>T<sub>E</sub>X style

1em = 10.00002pt 3em = 30.00005pt

### 4.8 Macrology

1=1  
 [23=23]  
 [29=29]  
 [29=29]  
 [10000=10000] [\$a\$ = \$a\$]