

1 Numbers

```
counta :=1=1
counta :=-1=-1
counta :=12=12
counta :=123456=123456
```

```
counta :=10=10
counta :='10=8
counta :="10=16
counta :='a=97
```

1.1 Coersions

```
countb :=10=10
counta :=countb=10
counta :=-countb=-10
dimenb :=1pt=1.0pt (sp=65536)
counta :=dimenb=65536
skipb :=1pt plus 1fill=1.0pt plus 1.0fill (sp=65536)
counta :=skipb=65536
```

1.2 Arithmetic

```
counta :=1=1
countb :=10=10
countb :=countb+counta=11
countb :=countb/2=5
counta :=23=23
countb :=10=10
counta :=counta/countb=2
counta :=1=1
countb :=10=10
countb :=countb-counta=9
```

1.3 Allocation

```
counttwo :=7=7
count 2:=count 2=7
```

1.4 Undefined?

count 128:=Unknown=0

2 Dimensions

2.1 Units

dimena :=1em=10.00002pt (sp=655361)
dimena :=1ex=4.30554pt (sp=282168)
dimena :=1pt=1.0pt (sp=65536)
dimena :=1pc=12.0pt (sp=786432)
dimena :=1in=72.26999pt (sp=4736286)
dimena :=1bp=1.00374pt (sp=65781)
dimena :=1cm=28.45274pt (sp=1864679)
dimena :=1mm=2.84526pt (sp=186467)
dimena :=1dd=1.07pt (sp=70124)
dimena :=1cc=12.8401pt (sp=841489)
dimena :=1sp=0.00002pt (sp=1)
dimena :=1truept=1.0pt (sp=65536)
dimena :=1truepc=12.0pt (sp=786432)
dimena :=1truein=72.26999pt (sp=4736286)
dimena :=1truebp=1.00374pt (sp=65781)
dimena :=1truecm=28.45274pt (sp=1864679)
dimena :=1truemm=2.84526pt (sp=186467)
dimena :=1ruedd=1.07pt (sp=70124)
dimena :=1truecc=12.8401pt (sp=841489)
dimena :=1truesp=0.00002pt (sp=1)

dimena :=10pt=10.0pt (sp=655360)
dimena :='10pt=8.0pt (sp=524288)
dimena :="10pt=16.0pt (sp=1048576)
dimena :='apt=97.0pt (sp=6356992)

2.2 Rounding

dimena :=0.01pt=0.01pt (sp=655)
dimena :=0.1pt=0.1pt (sp=6554)
dimena :=1pt=1.0pt (sp=65536)
dimena :=10pt=10.0pt (sp=655360)
dimena :=100pt=100.0pt (sp=6553600)
dimena :=0.0123pt=0.0123pt (sp=806)
dimena :=0.123pt=0.123pt (sp=8061)
dimena :=1.23pt=1.23pt (sp=80609)

```
dimena :=12.3pt=12.3pt (sp=806093)
dimena :=123pt=123.0pt (sp=8060928)
```

2.3 Coersions

```
countb :=10=10
dimena :=countb pt=10.0pt (sp=655360)
dimenb :=1pt=1.0pt (sp=65536)
dimena :=4.5 dimenb=4.5pt (sp=294912)
dimena :=countb dimenb=10.0pt (sp=655360)
dimena :=-countb dimenb=-10.0pt (sp=-655360)
skipb :=1pt plus 1fill=1.0pt plus 1.0fill (sp=65536)
dimena :=4.5 skipb=4.5pt (sp=294912)
```

2.4 Arithmetic

```
dimena :=123.4pt=123.4pt (sp=8087142)
dimenb :=1pt=1.0pt (sp=65536)
dimena :=dimena-dimenb=122.4pt (sp=8021606)
dimena :=dimena+dimenb=123.4pt (sp=8087142)
dimena :=dimena/2=61.7pt (sp=4043571)
countb :=10=10
dimena :=dimena/countb=6.17pt (sp=404357)
```

2.5 Allocation

```
counta :=7=7
dimen "counta :=dimen counta=1.23pt (sp=80609)
dimen 7:=1.23pt (sp=80609)
dimen "counta :=dimen counta + dimen 7=2.45999pt (sp=161218)
```

2.6 Undefined?

Unknown dimen: 0pt = 0.0pt

3 Glue

```
skipa :=1pt=1.0pt (sp=65536)
skipa :=0pt plus 2fill=0.0pt plus 2.0fill (sp=0)
skipa :=1pt plus 2pt=1.0pt plus 2.0pt (sp=65536)
skipa :=1pt plus 2pt minus 3pt=1.0pt plus 2.0pt minus 3.0pt (sp=65536)
skipa :=1pt plus 9fil=1.0pt plus 9.0fil (sp=65536)
```

```

skipa :=1pt plus 9fill=1.0pt plus 9.0fill (sp=65536)
skipa :=1pt plus 9filll=1.0pt plus 9.0filll (sp=65536)
skipa :=1pt plus 2fil minus 3filll=1.0pt plus 2.0fil minus 3.0filll (sp=65536)
skipa :=1pt plus 2fill minus 3fil=1.0pt plus 2.0fill minus 3.0fil (sp=65536)
skipa :=1pt plus 2filll minus 3fil=1.0pt plus 2.0filll minus 3.0fil (sp=65536)

```

3.1 Coersions

```

countb :=10=10
skipa :=countb pt=10.0pt (sp=655360)
dimenb :=1pt=1.0pt (sp=65536)
skipa :=4.5 dimenb=4.5pt (sp=294912)
skipa :=countb dimenb=10.0pt (sp=655360)
skipa :=-countb dimenb=-10.0pt (sp=-655360)
skipb :=1pt plus 1fill=1.0pt plus 1.0fill (sp=65536)
skipa :=skipb=1.0pt plus 1.0fill (sp=65536)
skipa :=-skipb=-1.0pt plus -1.0fill (sp=-65536)
skipa :=4.5 skipb=4.5pt (sp=294912)
skipa :=countb skipb=10.0pt (sp=655360)

```

3.2 Arithmetic

```

skipa :=1pt plus 2pt=1.0pt plus 2.0pt (sp=65536)
skipb :=1pt plus 1pt=1.0pt plus 1.0pt (sp=65536)
skipa :=skipa-skipb=0.0pt plus 1.0pt (sp=0)
skipa :=0pt plus 2fill=0.0pt plus 2.0fill (sp=0)
skipa :=skipa+skipb=1.0pt plus 2.0fill (sp=65536)

```

3.3 Undefined?

Unknown skip: 0pt = 0.0pt

4 MuGlue

4.1 Units

```

muskipa :=1mu=1.0mu
muskipa :=10mu=10.0mu
muskipa :='10mu=8.0mu
muskipa :="10mu=16.0mu
muskipa :='amu=97.0mu
muskipa :=0mu plus 2fill=0.0mu plus 2.0fill
muskipa :=1mu plus 2mu=1.0mu plus 2.0mu

```

```

muskipa :=1mu plus 2mu minus 3mu=1.0mu plus 2.0mu minus 3.0mu
muskipa :=1mu plus 9fil=1.0mu plus 9.0fil
muskipa :=1mu plus 9fill=1.0mu plus 9.0fill
muskipa :=1mu plus 9filll=1.0mu plus 9.0filll
muskipa :=1mu plus 2fil minus 3fill=1.0mu plus 2.0fil minus 3.0filll
muskipa :=1mu plus 2fill minus 3fill=1.0mu plus 2.0fill minus 3.0fill
muskipa :=1mu plus 2filll minus 3fil=1.0mu plus 2.0filll minus 3.0fil

```

4.2 Rounding

```

muskipa :=0.01mu=0.01mu
muskipa :=0.1mu=0.1mu
muskipa :=1mu=1.0mu
muskipa :=10mu=10.0mu
muskipa :=100mu=100.0mu
muskipa :=0.0123mu=0.0123mu
muskipa :=0.123mu=0.123mu
muskipa :=1.23mu=1.23mu
muskipa :=12.3mu=12.3mu
muskipa :=123mu=123.0mu

```

4.3 Coersions

```

countb :=10=10
muskipa :=countb mu=10.0mu
muskipb :=1mu plus 1fill=1.0mu plus 1.0fill
muskipa :=skipb=1.0mu plus 1.0fill
muskipa :=-skipb=-1.0mu plus -1.0fill
muskipa :=4.5 skipb=4.5mu
muskipa :=countb skipb=10.0mu
muskipa :=-countb skipb=-10.0mu

```

4.4 Arithmetic

```

muskipa :=123.4mu=123.4mu
muskipb :=1mu=1.0mu
muskipa :=muskipa-muskipb=122.4mu
muskipa :=muskipa+muskipb=123.4mu
muskipa :=muskipa/2=61.7mu
countb :=10=10
muskipa :=muskipa/countb=6.17mu
muskipa :=1mu plus 2mu=1.0mu plus 2.0mu
muskipb :=1mu plus 1mu=1.0mu plus 1.0mu

```

```

muskipa :=skipa-skipb=0.0mu plus 1.0mu
muskipa :=0mu plus 2fill=0.0mu plus 2.0fill
muskipa :=skipa+skipb=1.0mu plus 2.0fill

```

4.5 Allocation

```

counta :=7=7
muskip “counta :=muskip counta=1.23mu
muskip 7:=1.23mu
muskip “counta :=muskip counta + muskip 7=2.45999mu

```

4.6 Undefined?

Unknown muskip: 0pt = 0.0mu