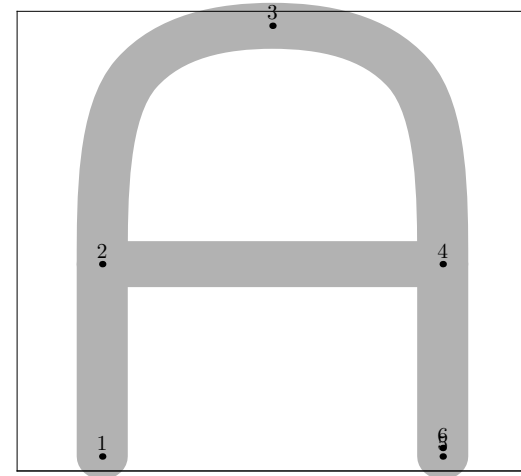


The Letter A

```

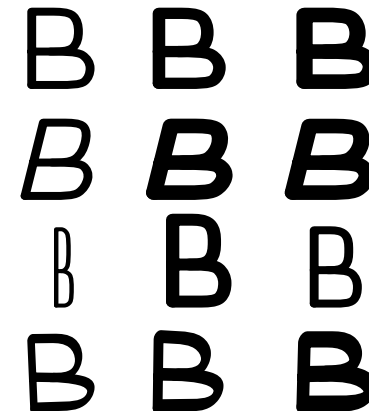
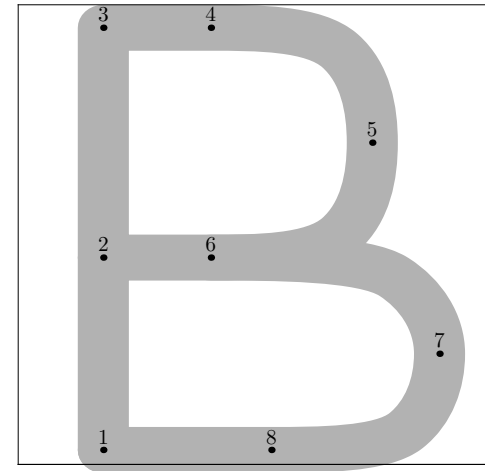
fmchar("A", 15, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = .5w + noise;
w - x4 = leftstemloc + noise;
w - x5 = leftstemloc + noise;
bot y1 = noise - o;
y2 = barheight + noise;
top y3 = h + o;           %no noise because of Aring
y4 = barheight + noise;
bot y5 = noise - o;
bot y6 = 0;               %no noise
z6 = whatever[z4, z5];
draw z1 -- z2
    & half(z2, z2 - z1, z3, randrt, z4, z5 - z4)
    & z4 -- z5;
draw z2 -- z4;
charanchortops_[charcode] = (.5w, h);
charanchorbots_[charcode] = z6;
labels(1, 2, 3, 4, 5, 6);
endchar;

```



The Letter *B*

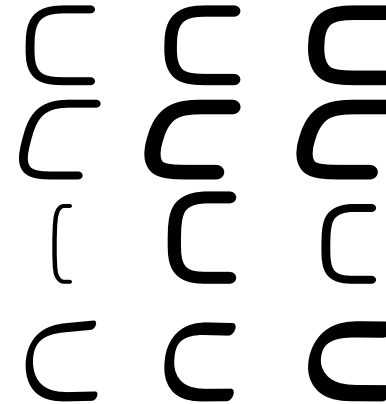
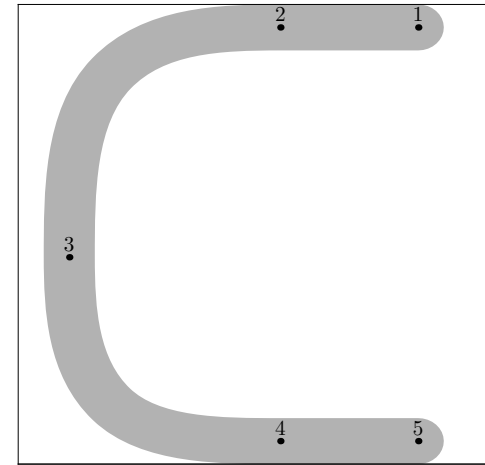
```
fmchar("B", 14, ht#, 0);
x1 = leftstemloc + noise;
x3 = leftstemloc + noise;
x7 = .5[w - x1, lft w] + noise;
x5 = .8[x1, x7] + noise;
x8 = .5[x1, x7] + noise;
x4 = .4[x1, x5] + noise;
x6 = .4[x1, x5] + noise;
bot y1 = noise - o;
y2 = barheight + noise;
top y3 = h + noise;
y4 = y3 + .5noise;
y6 = y2 + .5noise;
y8 = y1 + .5noise;
y5 = .5[y4, y6] + .5noise;
y7 = .5[y6, y8] + noise;
z2 = whatever[z1, z3];
draw z1 -- z3 -- z4
    & half(z4, z4 - z3, z5, -randup, z6, z2 - z6)
    & z6 -- z2;
draw half(z6, z6 - z2, z7, -randup, z8, z1 - z8)
    & z8 -- z1;
labels(1, 2, 3, 4, 5, 6, 7, 8);
endchar;
```



The Letter C

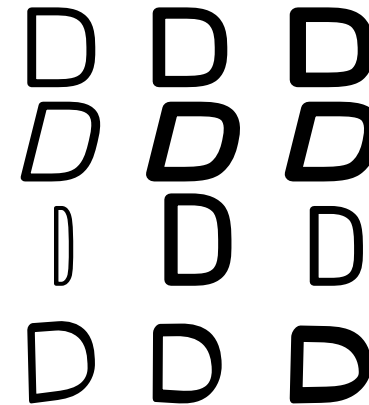
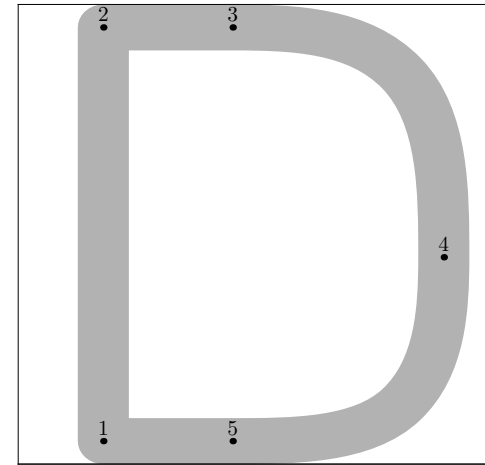
```
fmchar("C", 14, ht#, 0);
x1 = w - leftstemloc + ho + noise;
x2 = .55w + noise;
x3 = good.x(1.5u + s + noise);
x4 = .55w + noise;
x5 = w - leftstemloc + ho + noise;
top y1 = h + noise;
top y2 = h + noise;
y3 = barheight + noise;
bot y4 = 0;
z5 = z4 + whatever * randrt;
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, z5 - z4)
    & z4 -- z5;
charanchortops_[charcode] = (.5w, h);
charanchorbots_[charcode] = z4;
labels(1, 2, 3, 4, 5);
endchar;
```

%no noise!



The Letter *D*

```
fmchar("D", 14, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = .45w + noise;
x5 = .45w + noise;
w - x4 = good.x(1.5u + s + noise);
bot y1 = noise;
bot y5 = noise;
top y2 = h + noise;
top y3 = h + noise;
y4 = barheight + noise;
draw z1 -- z2 -- z3
    & half(z3, z3 - z2, z4, -randup, z5, z1 - z5)
    & z5 -- cycle;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5);
endchar;
```

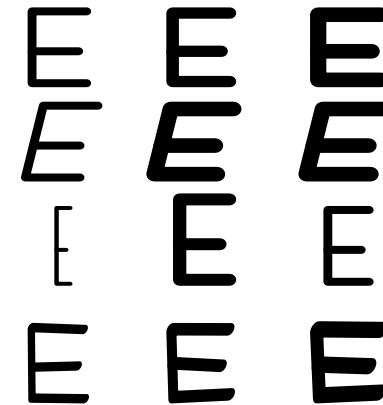
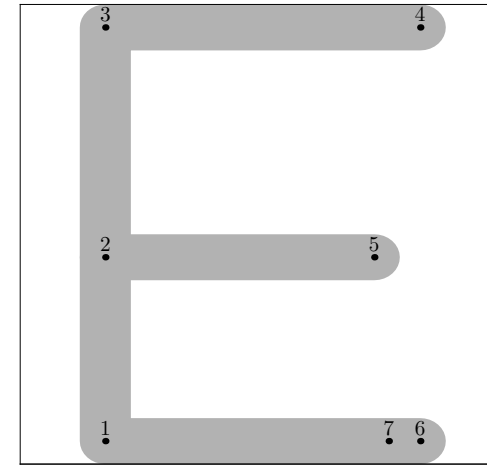


The Letter *E*

```

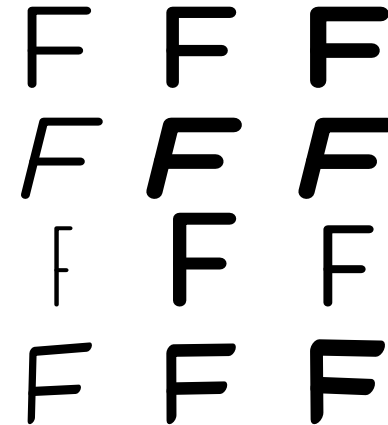
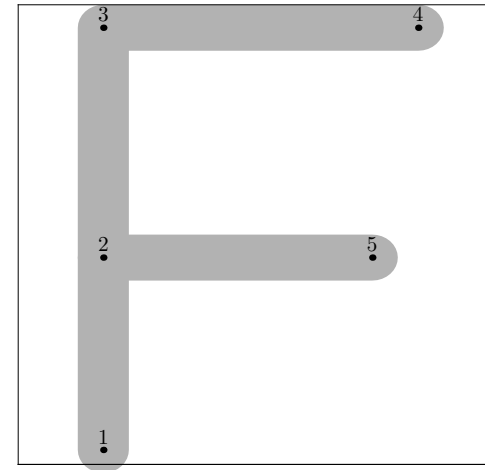
fmchar("E", 14, ht#, 0);
x1 = leftstemloc + noise;
x3 = leftstemloc + noise;
x4 = w − leftstemloc + o + noise;
x5 = w − leftstemloc + o − xgap + noise;
x6 = w − leftstemloc + o + noise;
x7 = .9[x1, x6];
bot y1 = noise;
y2 = barheight + noise;
top y3 = h + noise;
top y4 = h + noise;
y5 = barheight + noise;
bot y7 = 0;
z2 = whatever[z1, z3];
z6 = whatever[z1, z7];
draw z6 -- z1 -- z3 -- z4;
draw z2 -- z5;
charanchortops_[charcode] = (.5[leftstemloc, w − leftstemloc +
o], h);
charanchorbots_[charcode] = z7;
labels(1, 2, 3, 4, 5, 6, 7);
endchar;

```



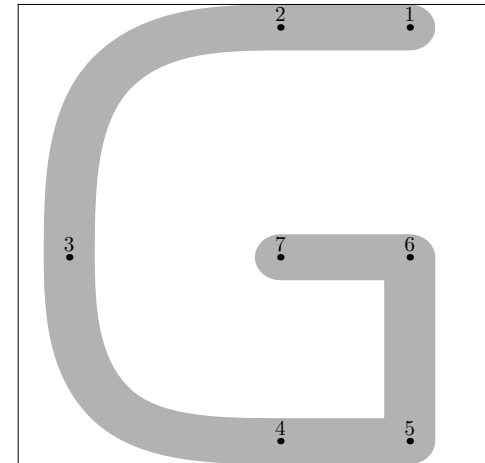
The Letter *F*

```
fmchar("F", 14, ht#, 0);
x1 = leftstemloc + noise;
x3 = leftstemloc + noise;
x4 = w - leftstemloc + ho + noise;
x5 = w - leftstemloc + ho - xgap + noise;
bot y1 = noise - o;
y2 = barheight + noise;
top y3 = h + noise;
top y4 = h + noise;
y5 = barheight + noise;
bot y6 = noise;
z2 = whatever[z1, z3];
draw z1 -- z3 -- z4;
draw z2 -- z5;
labels(1, 2, 3, 4, 5);
endchar;
```



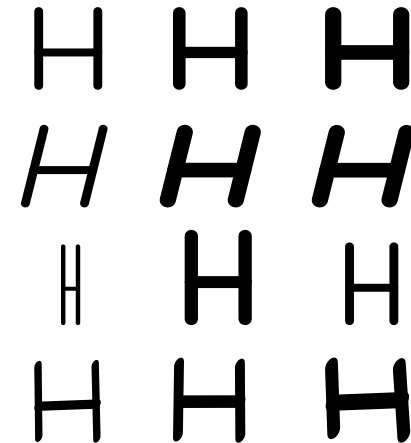
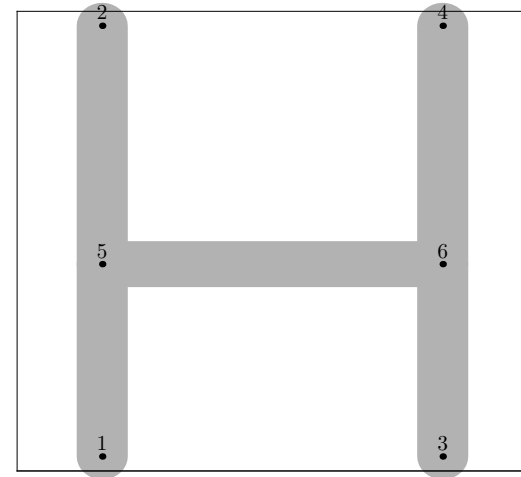
The Letter G

```
fmchar("G", 14, ht#, 0);
x3 = good.x(1.5u + s + noise);
x1 = w - leftstemloc + noise;
x5 = w - leftstemloc + noise;
x6 = w - leftstemloc + noise;
x2 = .55w + noise;
x4 = .55w + noise;
x7 = .55w + noise;
y3 = barheight + noise;
y6 = barheight + noise;
y7 = barheight + noise;
top y2 = h + noise;
top y1 = h + noise;
bot y4 = noise;
bot y5 = noise;
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, z5 - z4)
    & z4 -- z5 -- z6 -- z7;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```



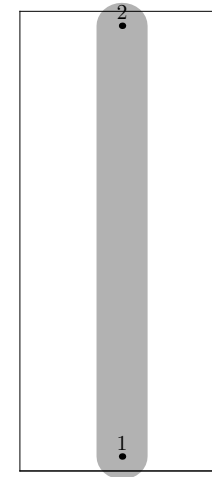
The Letter *H*

```
fmchar("H", 15, ht#, 0);
 $x_1 = \text{leftstemloc} + \text{noise};$ 
 $x_2 = \text{leftstemloc} + \text{noise};$ 
 $x_5 = \text{leftstemloc} + \text{noise};$ 
 $w - x_3 = \text{leftstemloc} + \text{noise};$ 
 $w - x_4 = \text{leftstemloc} + \text{noise};$ 
 $w - x_6 = \text{leftstemloc} + \text{noise};$ 
 $\text{bot } y_1 = \text{noise} - o;$ 
 $\text{top } y_2 = h + o + \text{noise};$ 
 $\text{bot } y_3 = \text{noise} - o;$ 
 $\text{top } y_4 = h + o + \text{noise};$ 
 $y_5 = \text{barheight} + \text{noise};$ 
 $y_6 = \text{barheight} + \text{noise};$ 
draw  $z_1$  --  $z_2$ ;
draw  $z_3$  --  $z_4$ ;
draw  $z_5$  --  $z_6$ ;
labels(1, 2, 3, 4, 5, 6);
endchar;
```



The Letter I

```
fmchar("I", 6, ht#, 0);  
x1 = .5w + noise;  
x2 = .5w + noise;  
bot y1 = noise - o;  
top y2 = h + o + noise;  
draw z1 -- z2;  
charanchortops_[charcode] = (.5w + noise, h);  
labels(1, 2);  
endchar;
```

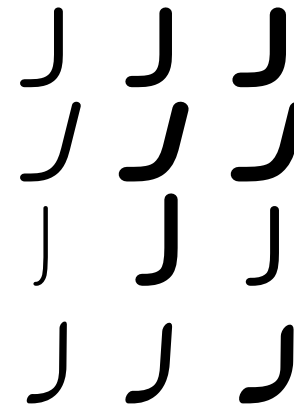
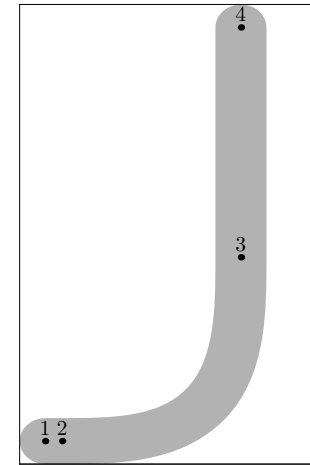


The Letter *J*

```

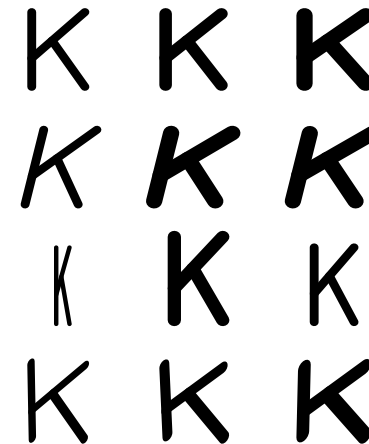
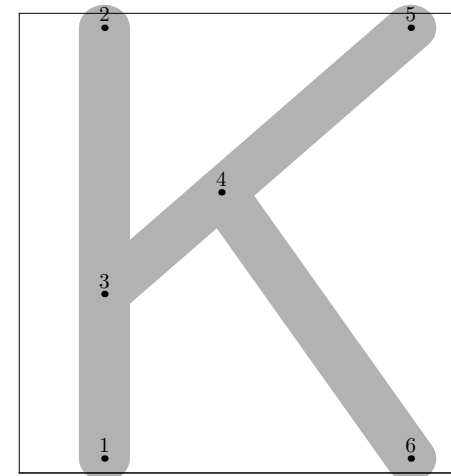
fmchar("J", 9, ht#, 0);
lft  $x_1 = noise - eps$ ;
 $x_2 = x_1 + .5u$ ;
 $w - x_3 = leftstemloc + noise$ ;
 $w - x_4 = leftstemloc + noise$ ;
bot  $y_1 = noise$ ;
 $y_3 = barheight + noise$ ;
top  $y_4 = h + noise$ ;
 $z_2 = z_1 + whatever * randrt$ ;
draw  $z_1$  --  $z_2$ 
    & arc( $z_2$ , randrt,  $z_3$ ,  $z_4 - z_3$ )
    &  $z_3$  --  $z_4$ ;
labels(1, 2, 3, 4);
endchar;

```



The Letter *K*

```
fmchar("K", 13, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
w - x5 = good.x(1.5u + s + noise);
w - x6 = good.x(1.5u + s + noise);
bot y1 = noise - o;
bot y6 = noise - o;
top y2 = h + o + noise;
top y5 = h + o + noise;
y3 = .618[y2, y1] + noise;
z3 = whatever[z1, z2];
z4 = whatever[z3, z5] = whatever[z2, z6];
draw z1 -- z2;
draw z3 -- z5;
draw z4 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;
```

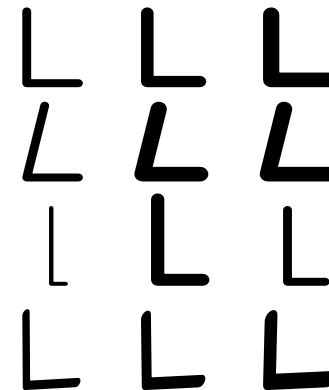
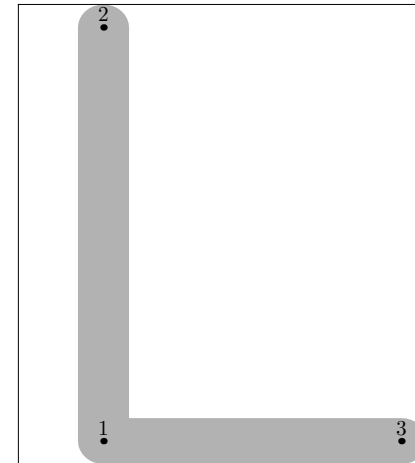


The Letter *L*

```

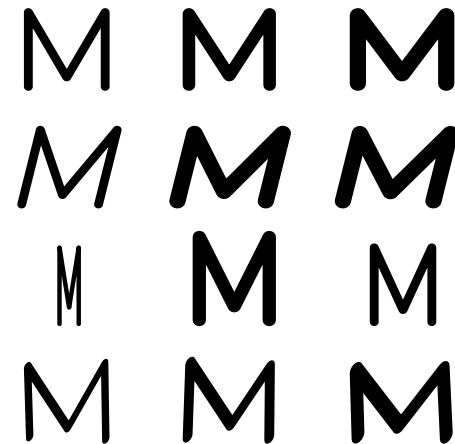
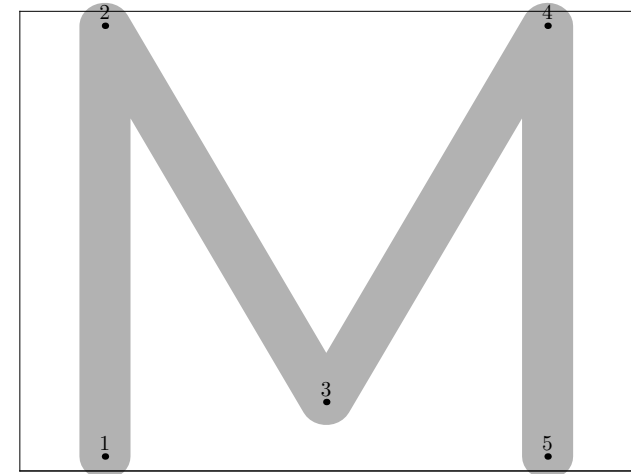
fmchar("L", 12, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
 $rt\ x_3 = w - eps + noise;$ 
 $bot\ y_1 = noise;$ 
 $bot\ y_3 = noise;$ 
 $top\ y_2 = h + noise;$ 
draw z3 -- z1 -- z2;
charanchortops_[charcode] = (leftstemloc, h);
charanchortoprighs_[charcode] = (.618w, h);
labels(1, 2, 3);
endchar;

```



The Letter *M*

```
fmchar("M", 18, ht#, 0);  
 $x_1 = leftstemloc + noise;$   
 $x_2 = leftstemloc + noise;$   
 $x_3 = .5w + noise;$   
 $x_4 = w - leftstemloc + noise;$   
 $x_5 = w - leftstemloc + noise;$   
 $bot\ y_1 = noise - o;$   
 $top\ y_2 = h + o + noise;$   
 $bot\ y_3 = ygap + noise;$   
 $top\ y_4 = h + o + noise;$   
 $bot\ y_5 = noise - o;$   
draw  $z_1$  --  $z_2$  --  $z_3$  --  $z_4$  --  $z_5$ ;  
labels(1, 2, 3, 4, 5);  
endchar;
```

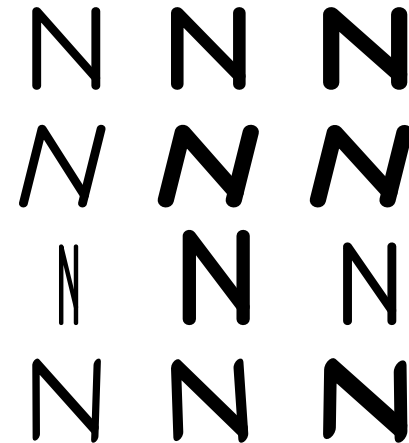
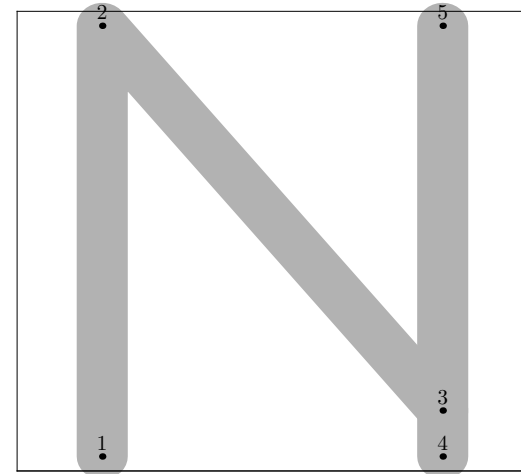


The Letter *N*

```

fmchar("N", 15, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x4 = w − leftstemloc + noise;
x5 = w − leftstemloc + noise;
bot y1 = noise − o;
top y2 = h + o + noise;
y3 = y4 + ygap + noise;
bot y4 = noise − o;
top y5 = h + o + noise;
z3 = whatever[z4, z5];
draw z1 -- z2 -- z3;
draw z4 -- z5;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5);
endchar;

```

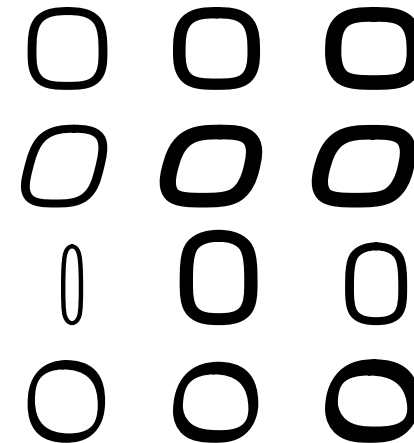
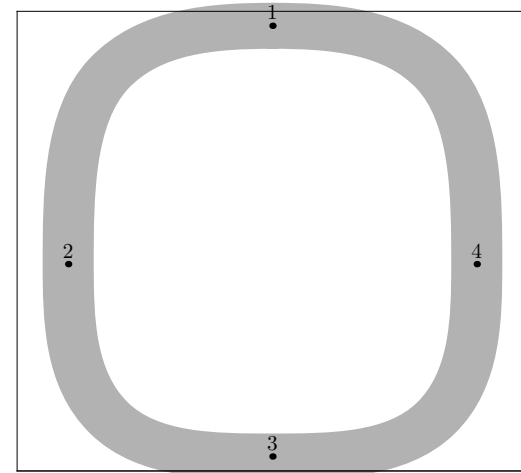


The Letter *O*

```

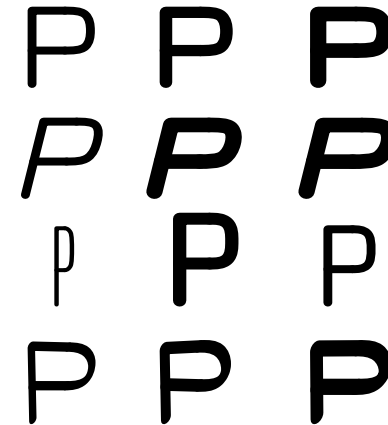
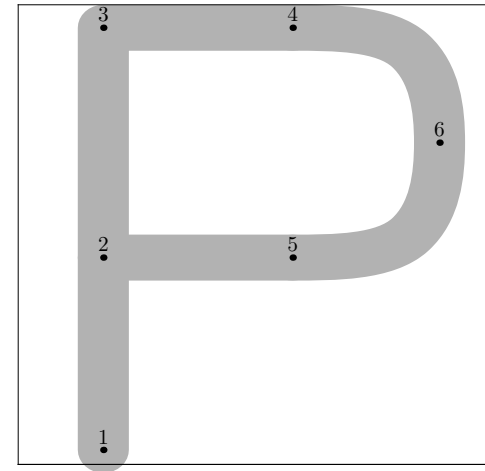
fmchar("O", 15, ht#, 0);
x1 = .5w + noise;
x2 = good.x(1.5u + s + noise);
x3 = .5w + noise;
w - x4 = good.x(1.5u + s + noise);
top y1 = h + o + noise;
y2 = barheight + noise;
bot y3 = noise - o;
y4 = barheight + noise;
draw full(z1, -randrt, z2, -randup, z3, randrt, z4, randup);
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4);
endchar;

```



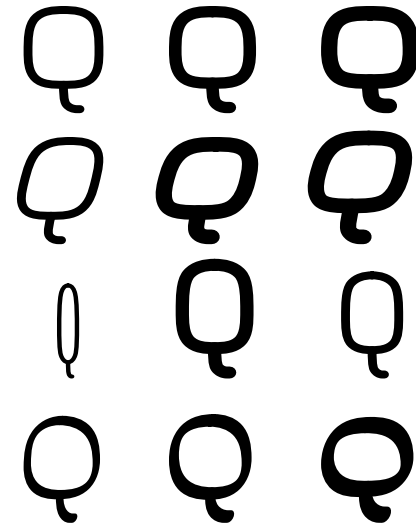
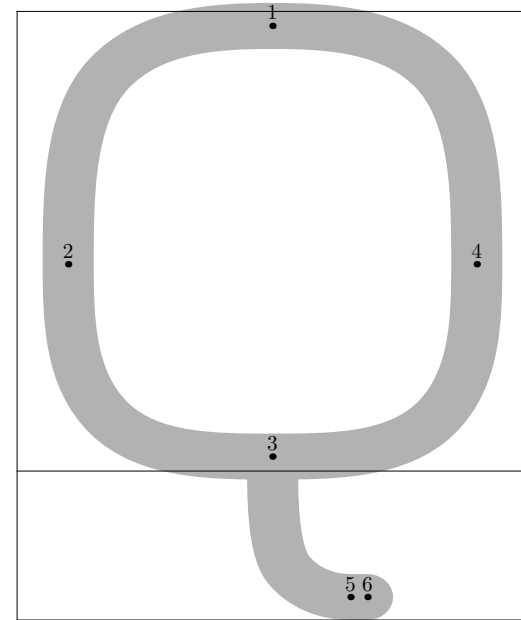
The Letter *P*

```
fmchar("P", 14, ht#, 0);
x1 = leftstemloc + noise;
x3 = leftstemloc + noise;
x4 = .618[x1, w - x1] + noise;
x5 = .618[x1, w - x1] + noise;
x6 = .5[w - x1, lft w] + noise;
y2 = barheight + noise;
y5 = barheight + noise;
bot y1 = noise - o;
top y3 = h + noise;
top y4 = h + noise;
y6 = .5[y4, y5] + noise;
z2 = whatever[z1, z3];
draw z1 -- z3 -- z4;
draw z2 -- z5;
draw half(z4, z4 - z3, z6, -randup, z5, z2 - z5);
labels(1, 2, 3, 4, 5, 6);
endchar;
```



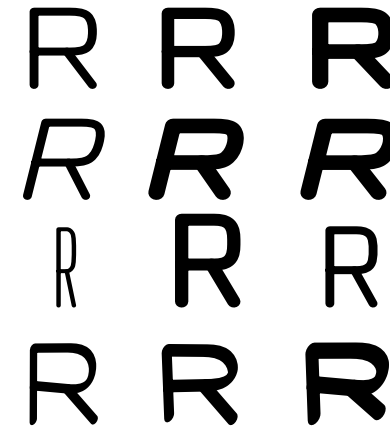
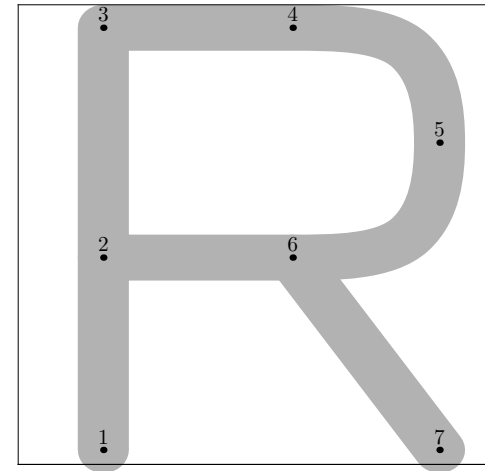
The Letter Q

```
fmchar("Q", 15, ht#, acc_depth#);
x1 = .5w + noise;
x2 = good.x(1.5u + s + noise);
x3 = .5w + noise;
w - x4 = good.x(1.5u + s + noise);
x5 = .618[x4, x3] + noise;
x6 = x5 + .5u;
top y1 = h + o + noise;
y2 = barheight + noise;
bot y3 = noise - o;
y4 = barheight + noise;
bot y5 = noise - d;
z6 = z5 + whatever * randrt;
draw full(z1, -randrt, z2, -randup, z3, randrt, z4, randup);
draw arc(z3, -randup, z5, z6 - z5)
    & z5 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;
```



The Letter *R*

```
fmchar("R", 14, ht#, 0);
x1 = leftstemloc + noise;
x3 = leftstemloc + noise;
x4 = .618[x1, w - x1] + noise;
x6 = .618[x1, w - x1] + noise;
x5 = .5[w - x1, lft w] + noise;
x7 = .5[w - x1, lft w] + noise;
y2 = barheight + noise;
y6 = barheight + noise;
bot y1 = noise - o;
bot y7 = noise - o;
top y3 = h + noise;
top y4 = h + noise;
y5 = .5[y4, y6] + noise;
z2 = whatever[z1, z3];
draw z1 -- z3 -- z4
    & half(z4, z4 - z3, z5, -randup, z6, z2 - z6)
    & z6 -- z2;
draw z6 -- z7;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```

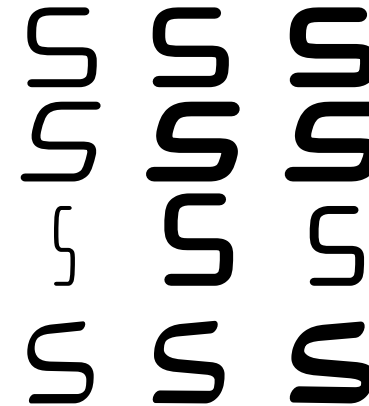
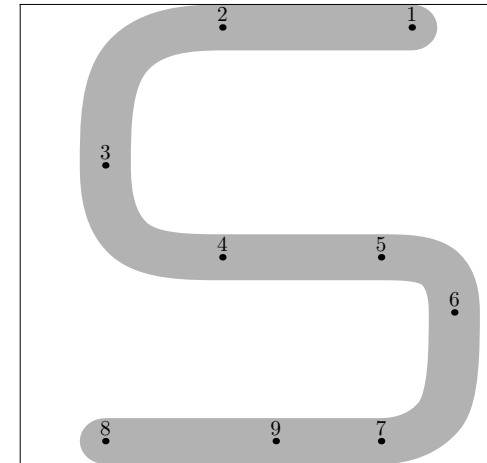


The Letter S

```

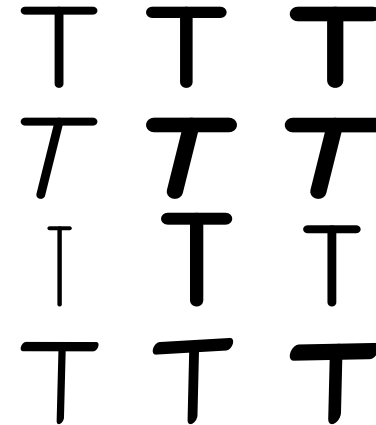
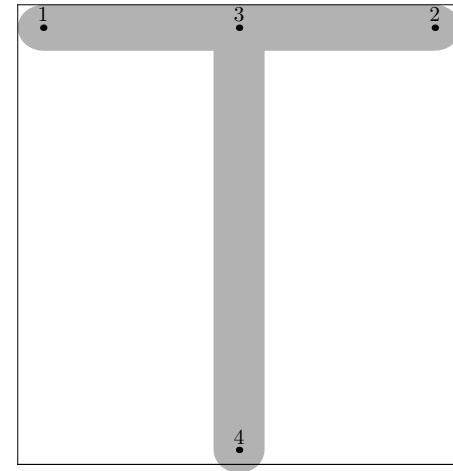
fmchar("S", 14, ht#, 0);
x3 = leftstemloc + noise;
x8 = leftstemloc + noise;
w - x1 = leftstemloc + noise;
x2 = .382[x3, x1] + noise;
x4 = .382[x3, x1] + noise;
x5 = .9[x3, x1] + noise;
x7 = .9[x3, x1] + noise;
x6 = .5[x1, w] + noise;
x9 = .618[x8, x7];
top y1 = h + noise;
top y2 = h + noise;
y3 = .6[y2, y4] + noise;
y4 = barheight + noise;
y5 = barheight + noise;
y6 = .3[y5, y7] + noise;
bot y9 = 0;
z7 = z9 + whatever * randrt;
z8 = whatever[z7, z9];
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, z5 - z4)
    & z4 -- z5
    & half(z5, z5 - z4, z6, -randup, z7, z8 - z7)
    & z7 -- z8;
charanchortops_[charcode] = (.5w, h);
charanchorbots_[charcode] = z9;
labels(1, 2, 3, 4, 5, 6, 7, 8, 9);
endchar;

```



The Letter *T*

```
fmchar("T", 13, ht#, 0);
italcorr ht# * slant + .5u#;
if .5w ≠ good.x .5w: change_width; fi
lft x1 = noise - eps;
rt x2 = w + noise;
x3 = .5w + noise;
x4 = .5w + noise;
top y1 = h + noise;
top y2 = h + noise;
bot y4 = noise - o;
z3 = whatever[z1, z2];
draw z1 -- z2;
draw z3 -- z4;
charanchortops_[charcode] = (.5w, h);
charanchorbots_[charcode] = (x4, 0);
labels(1, 2, 3, 4);
endchar;
```

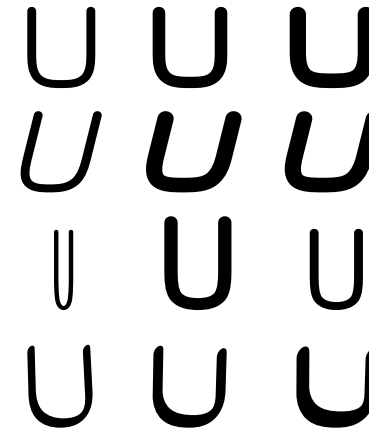
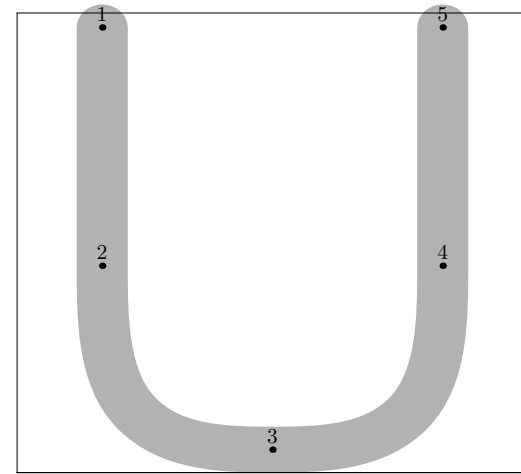


The Letter *U*

```

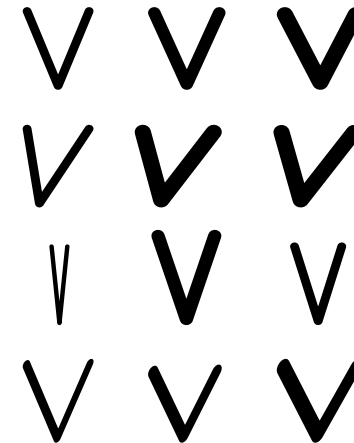
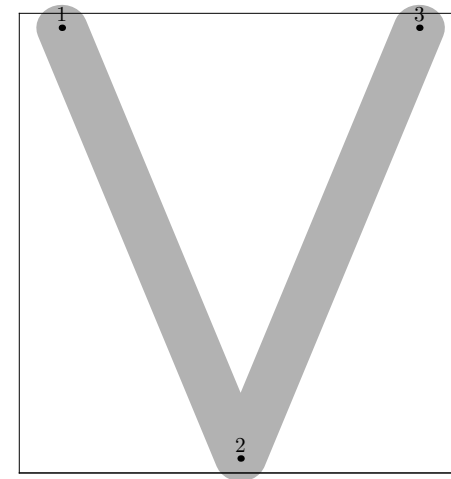
fmchar("U", 15, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
w − x4 = leftstemloc + noise;
w − x5 = leftstemloc + noise;
x3 = .5[x1, x4] + noise;
top y1 = h + o + noise;
y2 = barheight + noise;
bot y3 = noise;
y4 = barheight + noise;
top y5 = h + o + noise;
draw z1 -- z2
    & half(z2, z2 − z1, z3, randrt, z4, z5 − z4)
    & z4 -- z5;
charanchortops_[charcode] = (x3, h);
labels(1, 2, 3, 4, 5);
endchar;

```



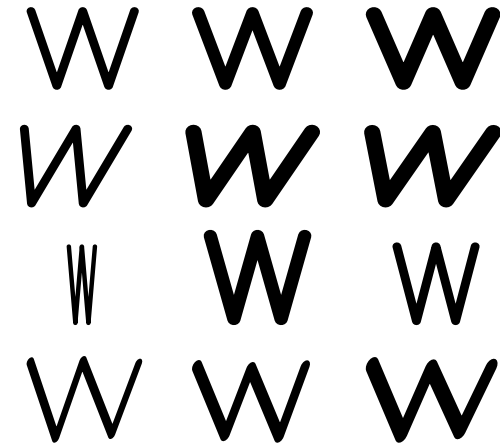
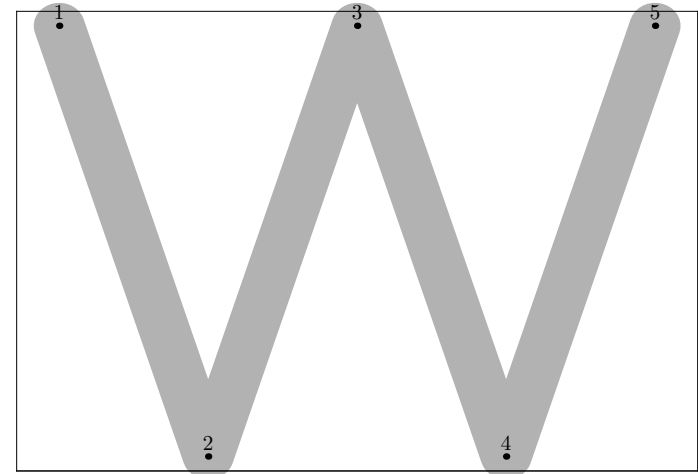
The Letter V

```
fmchar("V", 13, ht#, 0);  
 $x_1 = \text{good}.x(1.5u + s + \text{noise}) - ho;$   
 $w - x_3 = \text{good}.x(1.5u + s + \text{noise}) - ho;$   
 $x_2 = .5[x_1, x_3] + \text{noise};$   
 $\text{top } y_1 = h + o + \text{noise};$   
 $\text{bot } y_2 = \text{noise} - o;$   
 $\text{top } y_3 = h + o + \text{noise};$   
draw  $z_1$  --  $z_2$  --  $z_3$ ;  
labels(1, 2, 3);  
endchar;
```



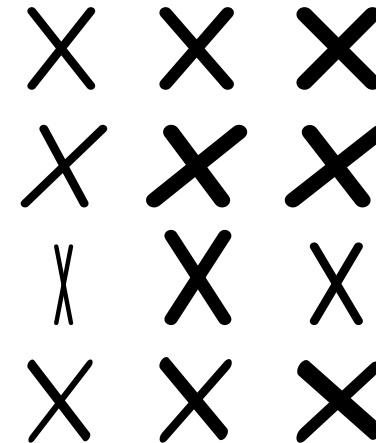
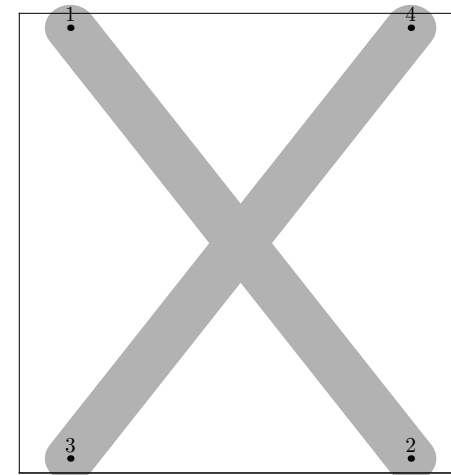
The Letter W

```
fmchar("W", 20, ht#, 0);
 $x_1 = \text{good}.x(1.5u + s + \text{noise}) - ho;$ 
 $w - x_5 = \text{good}.x(1.5u + s + \text{noise}) - ho;$ 
 $x_3 = .5[x_1, x_5] + \text{noise};$ 
 $x_2 = .5[x_1, x_3] + \text{noise};$ 
 $x_4 = .5[x_3, x_5] + \text{noise};$ 
 $\text{top } y_1 = h + o + \text{noise};$ 
 $\text{bot } y_2 = \text{noise} - o;$ 
 $\text{top } y_3 = h + o + \text{noise};$ 
 $\text{bot } y_4 = \text{noise} - o;$ 
 $\text{top } y_5 = h + o + \text{noise};$ 
draw  $z_1$  --  $z_2$  --  $z_3$  --  $z_4$  --  $z_5$ ;
labels(1, 2, 3, 4, 5);
endchar;
```



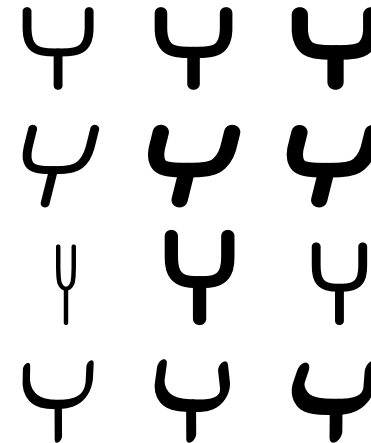
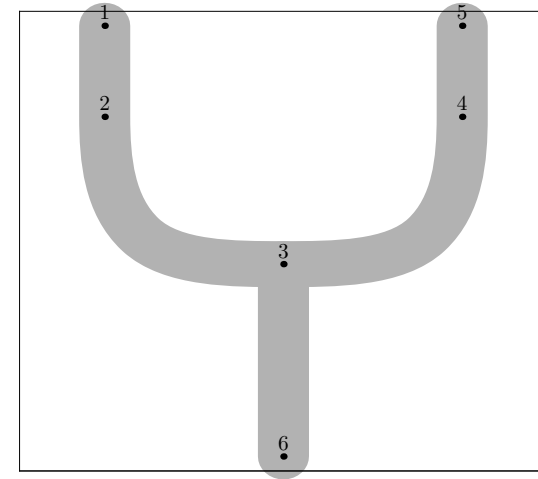
The Letter X

```
fmchar("X", 13, ht#, 0);  
 $x_1 = \text{good}.x(1.5u + s + \text{noise});$   
 $x_3 = \text{good}.x(1.5u + s + \text{noise});$   
 $w - x_2 = \text{good}.x(1.5u + s + \text{noise});$   
 $w - x_4 = \text{good}.x(1.5u + s + \text{noise});$   
 $\text{top } y_1 = h + o + \text{noise};$   
 $\text{top } y_4 = h + o + \text{noise};$   
 $\text{bot } y_3 = \text{noise} - o;$   
 $\text{bot } y_2 = \text{noise} - o;$   
draw  $z_1$  --  $z_2$ ;  
draw  $z_3$  --  $z_4$ ;  
labels(1, 2, 3, 4);  
endchar;
```



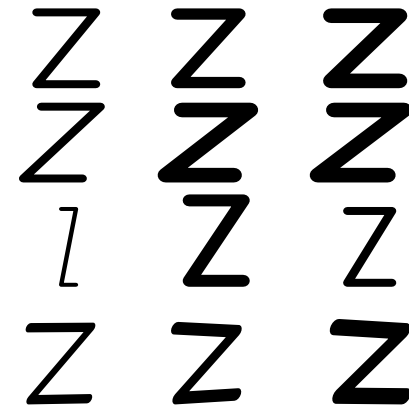
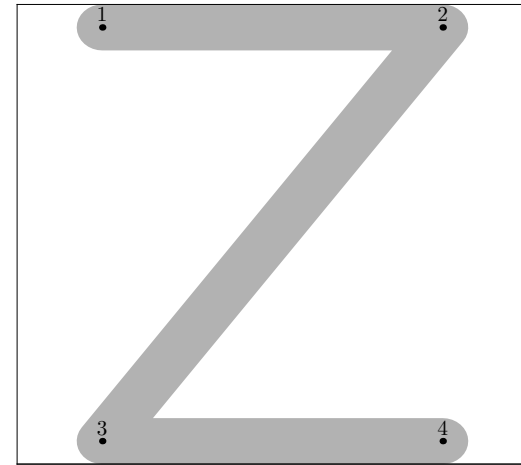
The Letter Y

```
fmchar("Y", 15.5, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + .5noise;
w - x4 = leftstemloc + .5noise;
w - x5 = leftstemloc + noise;
x3 = .5[x1, x5] + noise;
x6 = .5[x1, x5] + noise;
top y1 = h + o + noise;
top y5 = h + o + noise;
bot y6 = noise - o;
y3 = barheight + noise;
y2 = .618[y3, y5] + noise;
y4 = .618[y3, y5] + noise;
draw z1 -- z2
    & half(z2, z2 - z1, z3, randrt, z4, z5 - z4)
    & z4 -- z5;
draw z6 -- z3;
charanchortops__[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6);
endchar;
```



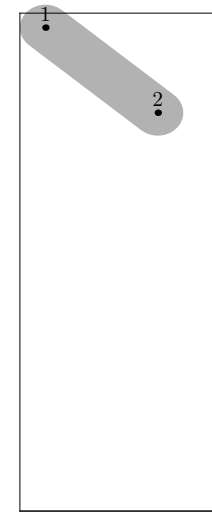
The Letter Z

```
fmchar("Z", 15, ht#, 0);
x1 = leftstemloc + noise;
w - x2 = leftstemloc + noise;
x3 = leftstemloc + noise;
w - x4 = leftstemloc + noise;
top y1 = h + noise;
top y2 = h + noise;
bot y3 = noise;
bot y4 = noise;
draw z1 -- z2 -- z3 -- z4;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4);
endchar;
```



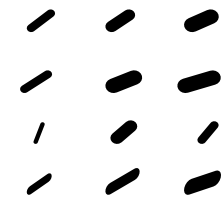
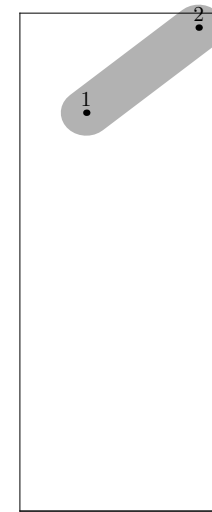
The Letter *grave*

```
fmchar("grave", 6,  $x_{ht\#} + acc_{ht\#}$ , 0);  
lft  $x_1 = noise$ ;  
rt  $x_2 = .8w + noise$ ;  
top  $y_1 = h + o + noise$ ;  
bot  $y_2 = .2[x_{ht}, h] + noise$ ;  
draw  $z_1 \text{ -- } z_2$ ;  
charanchortops[charcode] = (.5w,  $x_{ht}$ );  
labels(1, 2);  
endchar;
```



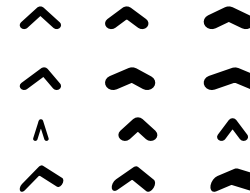
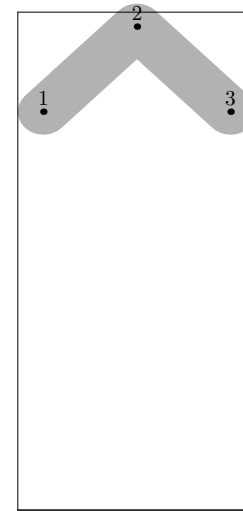
The Letter *acute*

```
fmchar("acute", 6, x_ht# + acc_ht#, 0);  
lft x_1 = .2w + noise;  
rt x_2 = w + noise;  
bot y_1 = .2[x_ht, h] + noise;  
top y_2 = h + o + noise;  
draw z_1 -- z_2;  
charanchortops_[charcode] = (.5w, x_ht);  
labels(1, 2);  
endchar;
```



The Letter *circumflex*

```
fmchar("circumflex", 7, x_ht# + acc_ht#, 0);
lft x_1 = noise;
x_2 = .5w + noise;
rt x_3 = w + noise;
bot y_1 = .2[x_ht, h] + noise;
bot y_3 = .2[x_ht, h] + noise;
top y_2 = h + o + noise;
draw z_1 -- z_2 -- z_3;
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3);
endchar;
```

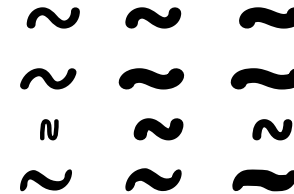
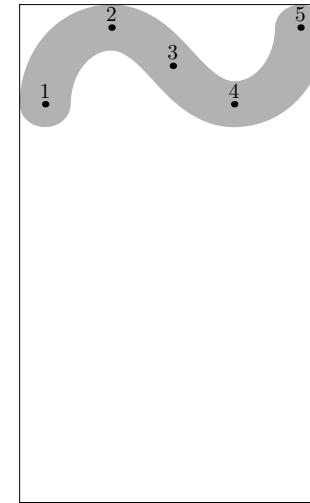


The Letter *tilde*

```

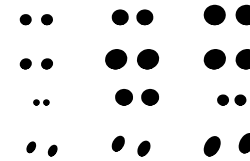
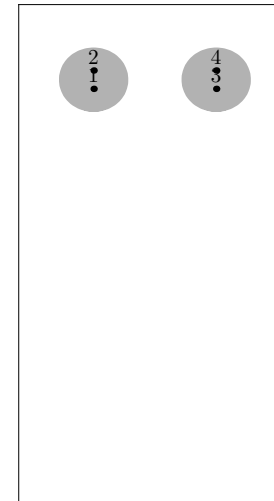
fmchar("tilde", 9, x_ht# + acc_ht#, 0);
lft x_1 = eps + noise;
x_2 = .3w + noise;
x_4 = .7w + noise;
x_3 = .5w + noise;
rt x_5 = w - eps + noise;
bot y_1 = .2[x_ht, h] + noise;
bot y_4 = .2[x_ht, h] + noise;
top y_2 = h + noise;
top y_5 = h + noise;
y_3 = .6[x_ht, h] + noise;
if angle direction 1 of (z_2{right} ... z_3 ... z_4{right}) < -90:
    draw z_1{randup} ... z_2{randrt} ... z_3{-randup} ... z_4{randrt} ...
z_5{randup};
else:
    draw z_1{randup} ... z_2{randrt} ... z_3 ... z_4{randrt} ...
z_5{randup};
fi
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3, 4, 5);
endchar;

```



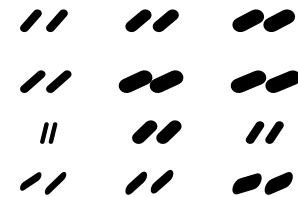
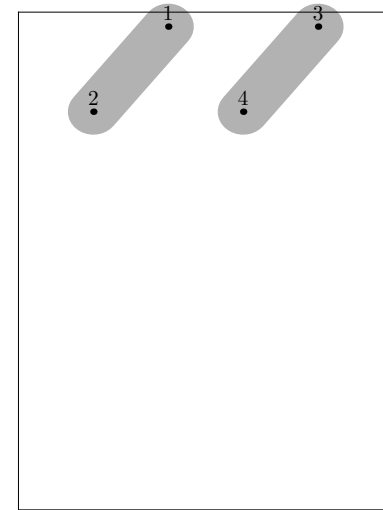
The Letter *dieresis*

```
fmchar("dieresis", 8, x_ht# + acc_ht#, 0);
x1 = x2 = .5w - max(1.8u, (1 + dotincr) * .7px) + noise;
x3 = x4 = .5w + max(1.8u, (1 + dotincr) * .7px) + noise;
bot y1 = .3[x_ht, h] + noise;
y2 = y1 + dotincr * py;
bot y3 = .3[x_ht, h] + noise;
y4 = y3 + dotincr * py;
draw dotcircle(z1, z2);
draw dotcircle(z3, z4);
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3, 4);
endchar;
```



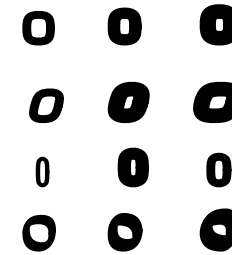
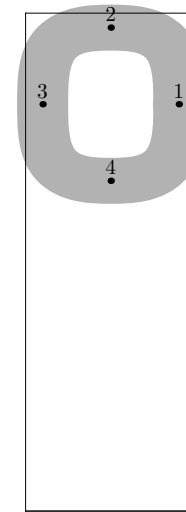
The Letter *hungarumlaut*

```
fmchar("hungarumlaut", 11, x_ht# + acc_ht#, 0);
x2 = .2w + noise;
x3 = .8w + noise;
x1 = .4w + noise;
x4 = .6w + noise;
top y1 = h + o + noise;
top y3 = h + o + noise;
bot y2 = .2[x_ht, h] + noise;
bot y4 = .2[x_ht, h] + noise;
draw z1 -- z2;
draw z3 -- z4;
charanchortops_[charcode] = (.4w, x_ht);
labels(1, 2, 3, 4);
endchar;
```



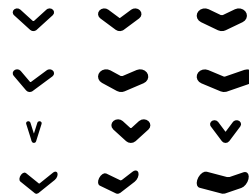
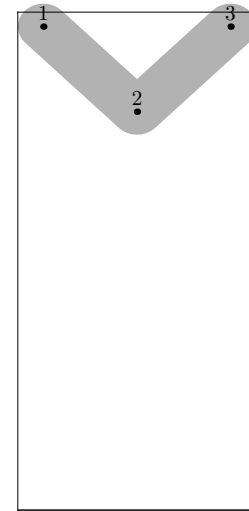
The Letter *ring*

```
fmchar("ring", 5, x_ht# + acc_ht#, 0);
lft x3 = -o + noise;
rt x1 = w + o + noise;
x2 = .5w + noise;
x4 = .5w + noise;
top y4 = x_ht + o;           %no noise because of Aring
top y2 = h + o + noise;
y1 = .5[y2, y4] + noise;
y3 = .5[y2, y4] + noise;
draw full(z1, randup, z2, -randrt, z3, -randup, z4, randrt);
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3, 4);
endchar;
```



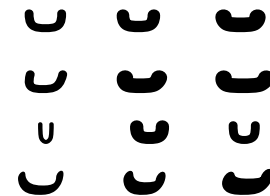
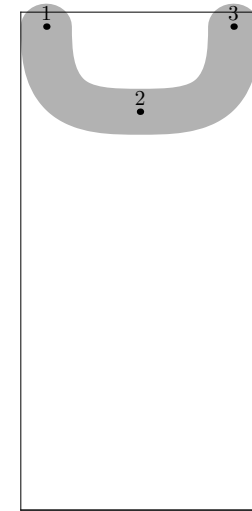
The Letter *caron*

```
fmchar("caron", 7, x_ht# + acc_ht#, 0);
lft x_1 = noise;
x_2 = .5w + noise;
rt x_3 = w + noise;
top y_1 = h + o + noise;
top y_3 = h + o + noise;
bot y_2 = .2[x_ht, h] + noise;
draw z_1 -- z_2 -- z_3;
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3);
endchar;
```



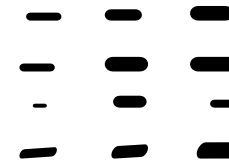
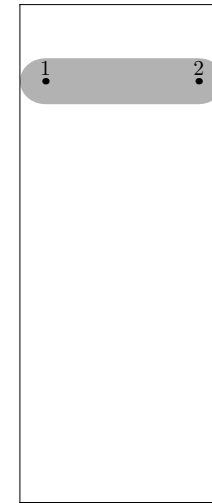
The Letter *breve*

```
fmchar("breve", 7, x_ht# + acc_ht#, 0);
lft x_1 = noise;
x_2 = .5w + noise;
rt x_3 = w + noise;
top y_1 = h + o + noise;
top y_3 = h + o + noise;
bot y_2 = .2[x_ht, h] + noise;
draw half(z_1, -randup, z_2, randrt, z_3, randup);
charanchortops_[charcode] = (.5w, x_ht);
labels(1, 2, 3);
endchar;
```



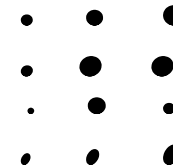
The Letter *macron*

```
fmchar("macron", 6, x_ht# + acc_ht#, 0);  
lft x_1 = noise;  
rt x_2 = w + noise;  
y_1 = .5[x_ht, h] + noise;  
y_2 = .5[x_ht, h] + noise;  
draw z_1 -- z_2;  
charanchortops_[charcode] = (.5w, x_ht);  
labels(1, 2);  
endchar;
```



The Letter *dotaccent*

```
fmchar("dotaccent", 4, x_ht# + acc_ht#, 0);  
x_1 = x_2 = .5w + noise;  
bot y_1 = .5[x_ht, h] + noise;  
y_2 = y_1 + dotincr * py;  
draw dotcircle(z_1, z_2);  
charanchortops_[charcode] = (.5w, x_ht);  
labels(1, 2);  
endchar;
```

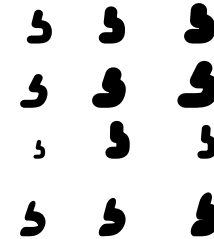
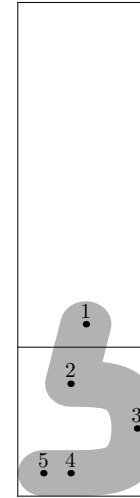


The Letter *cedilla*

```
fmchar("cedilla", 4, x_ht#, acc_depth#);
x1 = .5w;
lft x2 = .2w + .5noise;
rt x3 = w + o + .5noise;
x4 = x2;
lft x5 = 0;
bot y1 = 0;
y2 = .4[y1, y4];
y3 = .7[y1, y4];
bot y4 = noise - d;
z5 = z4 + whatever * randrt;
draw z5 -- z4
    & half(z4, z4 - z5, z3, randup, z2, -randrt)
    & z2 -- z1;
charanchorbots_[charcode] = z1;
labels(1, 2, 3, 4, 5);
endchar;
```

%no noise!

%no noise!



The Letter *ogonek*

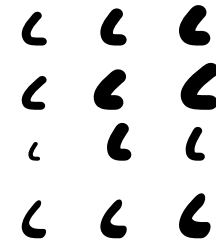
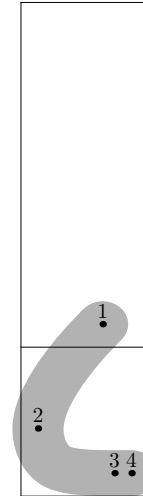
```

fmchar("ogonek", 4, x_ht#, acc_depth#);
x1 = .6w;
lft x2 = -o + .5noise;
rt x4 = w + .5noise;
x3 = x4 - .5u;
bot y1 = 0;
y2 = .7[y1, y4];
bot y3 = noise - d;
z4 = z3 + whatever * randrt;
pair randir;
randir := -randup;
draw z1 .. tension infinity and 1 .. z2{randir}
    & arc(z2, randir, z3, randrt)
    & z3 -- z4;
charanchorbots_[charcode] = z1;
labels(1, 2, 3, 4, 5);
endchar;

```

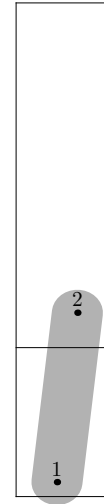
%no noise!

%no noise!



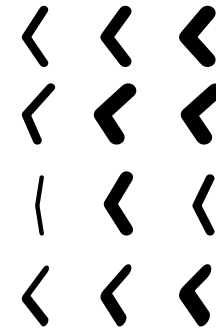
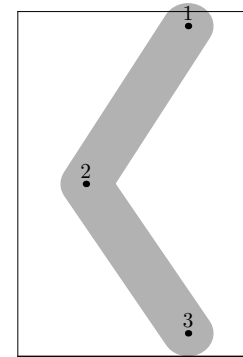
The Letter *quotesinglbase*

```
fmchar("quotesinglbase", 3, x_ht#, comma_depth#);  
x_1 = .4w + noise;  
x_2 = .6w + noise;  
bot y_1 = noise - d - o;  
y_2 = -d + ht - .5[barheight, x_ht] + noise;  
draw z_1 -- z_2;  
labels(1, 2);  
endchar;
```



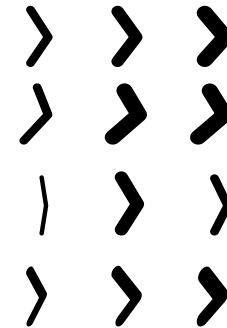
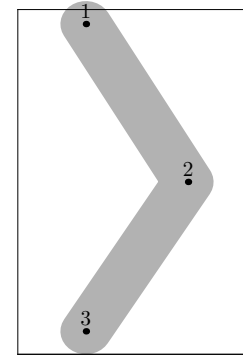
The Letter *guilsinglleft*

```
fmchar("guilsinglleft", 7, x_ht#, 0);  
x1 = good.x(w - 2u - s + noise);  
x2 = good.x(2u + s + noise);  
x3 = good.x(w - 2u - s + noise);  
top y1 = h + o + noise;  
bot y3 = noise;  
y2 = .5h + noise;  
draw z1 -- z2 -- z3;  
labels(1, 2, 3);  
endchar;
```



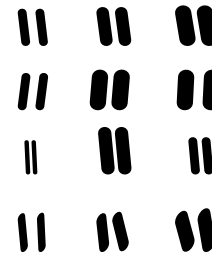
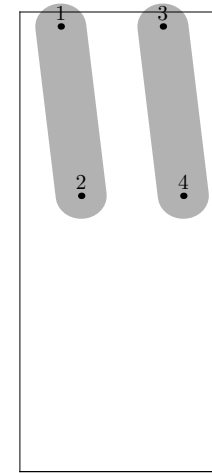
The Letter *guilsinglright*

```
fmchar("guilsinglright", 7, x_ht#, 0);  
x1 = good.x(2u + s + noise);  
x2 = good.x(w - 2u - s + noise);  
x3 = good.x(2u + s + noise);  
top y1 = h + o + noise;  
bot y3 = noise;  
y2 = .5h + noise;  
draw z1 -- z2 -- z3;  
labels(1, 2, 3);  
endchar;
```



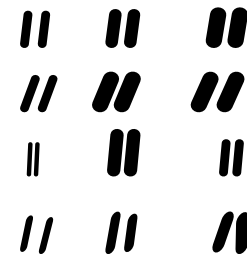
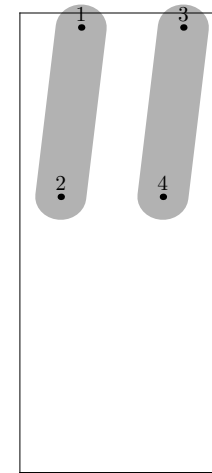
The Letter *quotedblleft*

```
fmchar("quotedblleft", 6, ht#, 0);
x1 = .2w + noise;
x4 = .8w + noise;
x2 = .3w + noise;
x3 = .7w + noise;
top y1 = h + o + noise;
top y3 = h + o + noise;
y2 = .5[barheight, xht] + noise;
y4 = .5[barheight, xht] + noise;
draw z1 -- z2;
draw z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



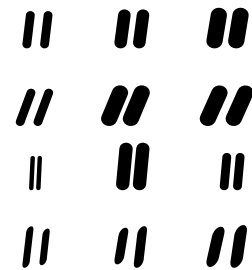
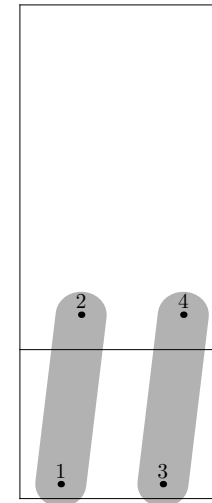
The Letter *quotedblright*

```
fmchar("quotedblright", 6, ht#, 0);
x2 = .2w + noise;
x3 = .8w + noise;
x1 = .3w + noise;
x4 = .7w + noise;
top y1 = h + o + noise;
top y3 = h + o + noise;
y2 = .5[barheight, x_ht] + noise;
y4 = .5[barheight, x_ht] + noise;
draw z1 -- z2;
draw z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



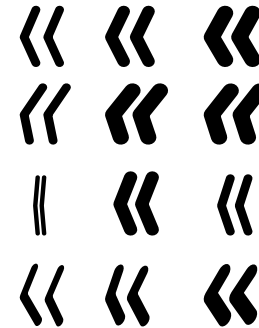
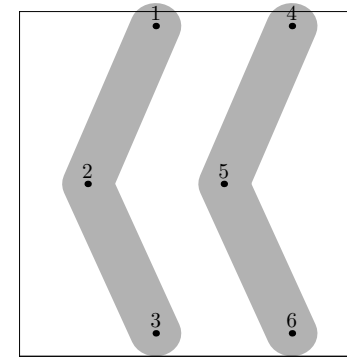
The Letter *quotedblbase*

```
fmchar("quotedblbase", 6, x_ht#, comma_depth#);
x_2 = .3w + noise;
x_3 = .7w + noise;
x_1 = .2w + noise;
x_4 = .8w + noise;
bot y_1 = noise - d - o;
bot y_3 = noise - d - o;
y_2 = -d + ht - .5[barheight, x_ht] + noise;
y_4 = -d + ht - .5[barheight, x_ht] + noise;
draw z_1 -- z_2;
draw z_3 -- z_4;
labels(1, 2, 3, 4);
endchar;
```



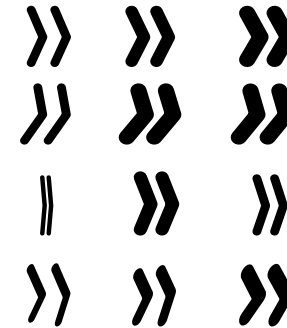
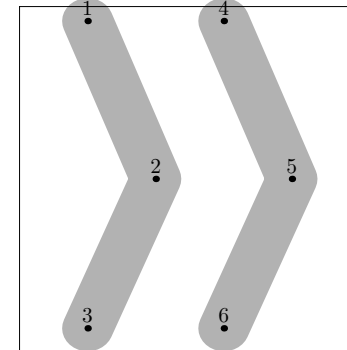
The Letter *guillemotleft*

```
fmchar("guillemotleft", 10, x_ht#, 0);
x1 = .4w + noise;
x2 = good.x(2u + s + noise);
x3 = .4w + noise;
x4 = good.x(w - 2u - s + noise);
x5 = .6w + noise;
x6 = good.x(w - 2u - s + noise);
top y1 = h + o + noise;
bot y3 = noise;
y2 = .5h + noise;
top y4 = h + o + noise;
bot y6 = noise;
y5 = .5h + noise;
draw z1 -- z2 -- z3;
draw z4 -- z5 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;
```



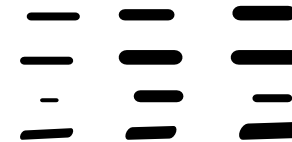
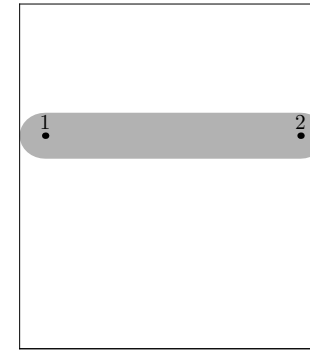
The Letter *guillemotright*

```
fmchar("guillemotright", 10, x_ht#, 0);
x1 = good.x(2u + s + noise);
x2 = .4w + noise;
x3 = good.x(2u + s + noise);
x4 = .6w + noise;
x5 = good.x(w - 2u - s + noise);
x6 = .6w + noise;
top y1 = h + o + noise;
bot y3 = noise;
y2 = .5h + noise;
top y4 = h + o + noise;
bot y6 = noise;
y5 = .5h + noise;
draw z1 -- z2 -- z3;
draw z4 -- z5 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;
```



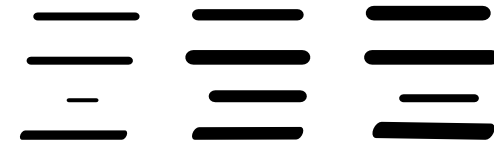
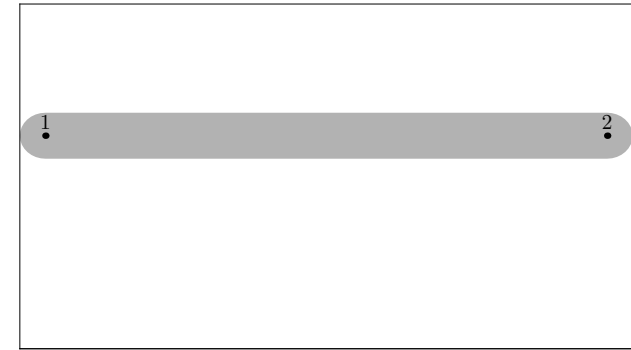
The Letter *endash*

```
fmchar("endash", 9, x_ht#, 0);  
lft x_1 = noise;  
rt x_2 = w + noise;  
y_1 = .618h + noise;  
y_2 = .618h + noise;  
draw z_1 -- z_2;  
labels(1, 2);  
endchar;
```



The Letter *emdash*

```
fmchar("emdash", 18, x_ht#, 0);  
lft x_1 = noise;  
rt x_2 = w + noise;  
y_1 = .618h + noise;  
y_2 = .618h + noise;  
draw z_1 -- z_2;  
labels(1, 2);  
endchar;
```

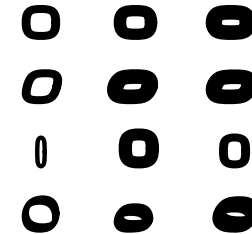
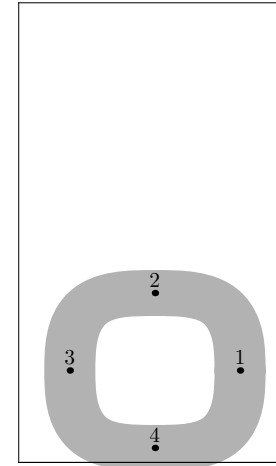


The Letter *cwm*

```
beginchar(enc("cwm") + code_offset, 0, ht#, 0);  
z_1 = (0, 0);  
undraw z_1; %just for fontforge  
labels(1);  
endchar;
```

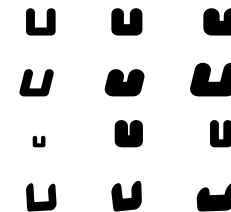
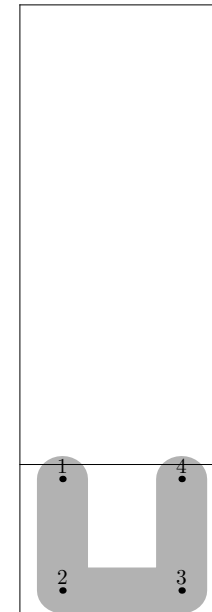
The Letter *perthousandzero*

```
fmchar("perthousandzero", 8, ht#, 0);  
 $x_3 = \text{good}.x(1.5u + s + \text{noise});$   
 $w - x_1 = \text{good}.x(1.5u + s + \text{noise});$   
 $x_2 = .5w + \text{noise};$   
 $x_4 = .5w + \text{noise};$   
 $y_1 = .2h + \text{noise};$   
 $\text{top } y_2 = .4h + o + \text{noise};$   
 $y_3 = .2h + \text{noise};$   
 $\text{bot } y_4 = \text{noise} - o;$   
 $\text{draw full}(z_1, \text{randup}, z_2, -\text{randrt}, z_3, -\text{randup}, z_4, \text{randrt});$   
labels(1, 2, 3, 4);  
endchar;
```



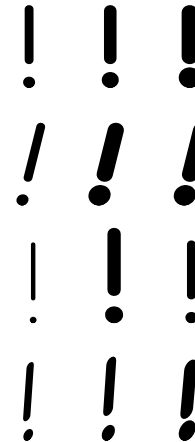
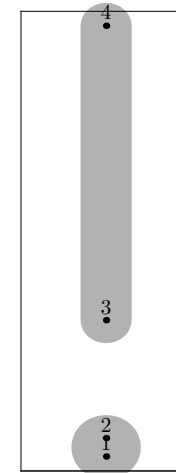
The Letter *visible*space

```
fmchar("visible", 6, ht#, comma_depth#);
lft x1 = good.x(.5u + noise);
lft x2 = good.x(.5u + noise);
rt x3 = good.x(w - .5u + noise);
rt x4 = good.x(w - .5u + noise);
top y1 = o + noise;
top y4 = o + noise;
bot y2 = noise - d;
bot y3 = noise - d;
draw z1 -- z2 -- z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



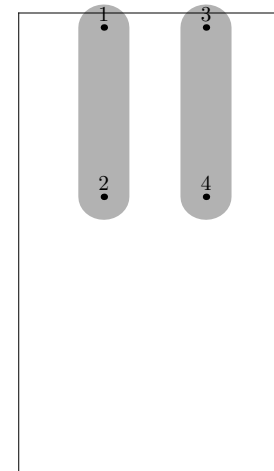
The Letter *exclam*

```
fmchar("exclam", 5, ht#, 0);
x1 = x2 = .5w + noise;
x3 = .5w + noise;
x4 = .5w + noise;
bot y1 = noise - o;
y2 = y1 + dotincr * py;
top y4 = h + o + noise;
bot y3 = max(.618barheight, top y2 + eps) + noise;
draw dotcircle(z1, z2);
draw z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



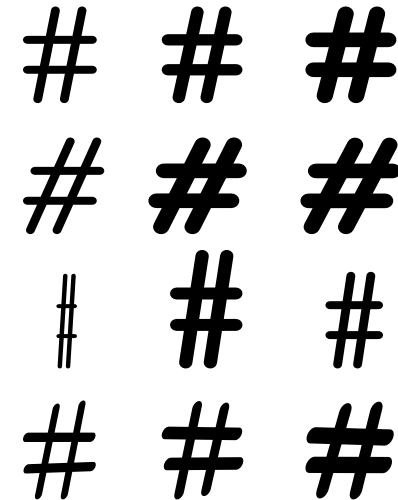
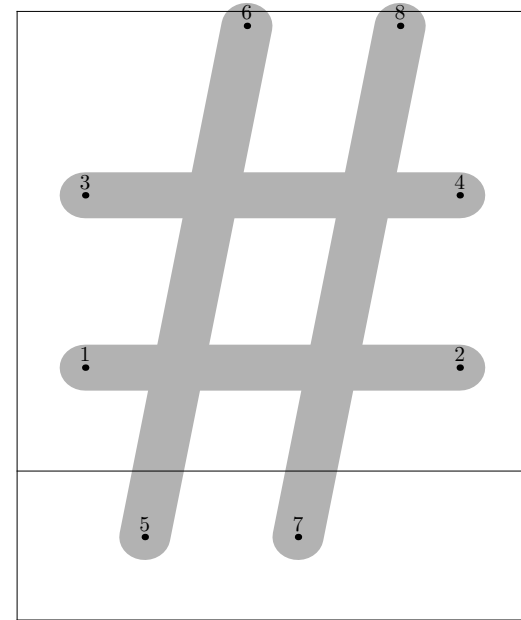
The Letter *quotedbl*

```
fmchar("quotedbl", 8, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = w - leftstemloc + noise;
x4 = w - leftstemloc + noise;
top y1 = h + o + noise;
top y3 = h + o + noise;
y2 = .5[barheight, xht] + noise;
y4 = .5[barheight, xht] + noise;
draw z1 -- z2;
draw z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



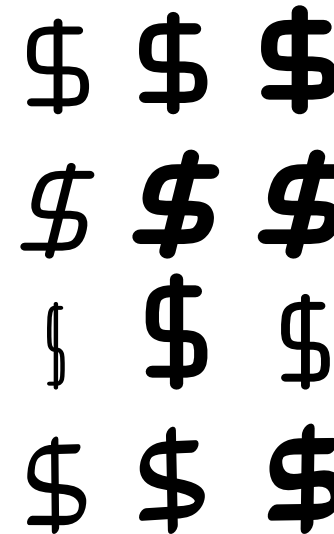
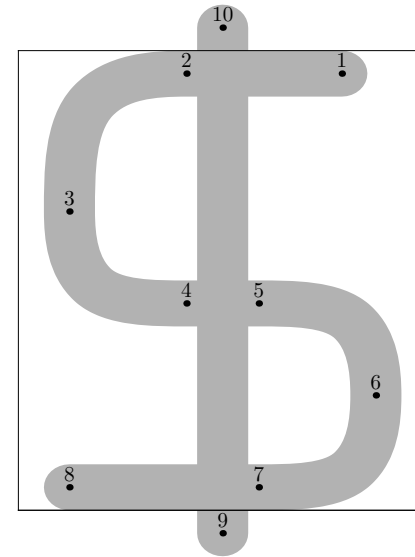
The Letter *numbersign*

```
fmchar("numbersign", 15, ht#, comma_depth#);
x1 = good.x(2u + s + noise);
x2 = good.x(w - 2u - s + noise);
x3 = good.x(2u + s + noise);
x4 = good.x(w - 2u - s + noise);
x5 = .25w + noise;
x6 = .45w + noise;
x7 = .55w + noise;
x8 = .75w + noise;
y1 = .3x_ht + noise;
y2 = .3x_ht + noise;
y3 = .8x_ht + noise;
y4 = .8x_ht + noise;
bot y5 = 1.1x_ht - h - o + noise;
top y6 = h + o + noise;
bot y7 = 1.1x_ht - h - o + noise;
top y8 = h + o + noise;
draw z1 -- z2;
draw z3 -- z4;
draw z5 -- z6;
draw z7 -- z8;
labels(1, 2, 3, 4, 5, 6, 7, 8);
endchar;
```



The Letter *dollar*

```
fmchar("dollar", 12, ht#, 0);
x3 = good.x(1.5u + s + noise);
x8 = good.x(1.5u + s + noise);
w - x1 = leftstemloc + noise;
w - x6 = good.x(1.5u + s + noise);
x2 = .382[x3, x6] + noise;
x4 = .382[x3, x6] + noise;
x5 = .618[x3, x6] + noise;
x7 = .618[x3, x6] + noise;
x9 = .5w + noise;
x10 = .5w + noise;
top y1 = h + noise;
top y2 = h + noise;
y3 = .6[y2, y4] + noise;
y4 = barheight + noise;
y5 = barheight + noise;
y6 = .5[y5, y7] + noise;
bot y7 = noise;
bot y8 = noise;
top y9 = noise;
bot y10 = h + noise;
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, z5 - z4)
    & z4 -- z5
    & half(z5, z5 - z4, z6, -randup, z7, z8 - z7)
    & z7 -- z8;
draw z9 -- z10;
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
endchar;
```

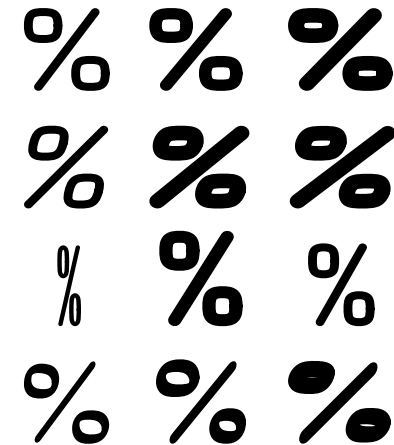
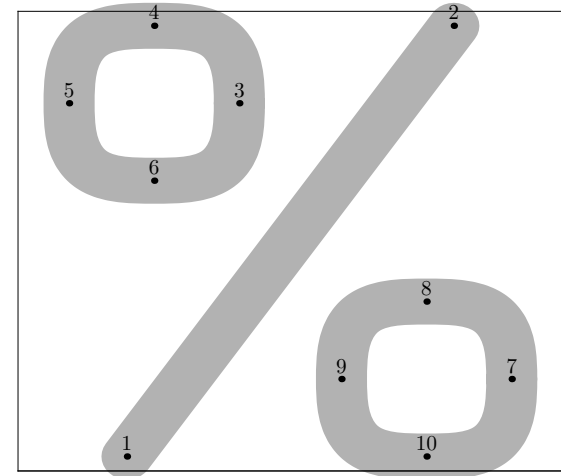


The Letter *percent*

```

fmchar("percent", 16, ht#, 0);
x5 = good.x(1.5u + s + noise);
w - x7 = good.x(1.5u + s + noise);
x1 = .2w + noise;
x2 = .8w + noise;
x3 = 6.5u + s + noise;
x4 = 4u + s + noise;
x6 = 4u + s + noise;
w - x8 = 4u + s + noise;
w - x9 = 6.5u + s + noise;
w - x10 = 4u + s + noise;
bot y1 = noise - o;
top y2 = h + o + noise;
y3 = .8h + noise;
top y4 = h + o + noise;
y5 = .8h + noise;
bot y6 = .6h - o + noise;
y7 = .2h + noise;
top y8 = .4h + o + noise;
y9 = .2h + noise;
bot y10 = noise - o;
draw z1 -- z2;
draw full(z3, randup, z4, -randrt, z5, -randup, z6, randrt);
draw full(z7, randup, z8, -randrt, z9, -randup, z10, randrt);
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
endchar;

```

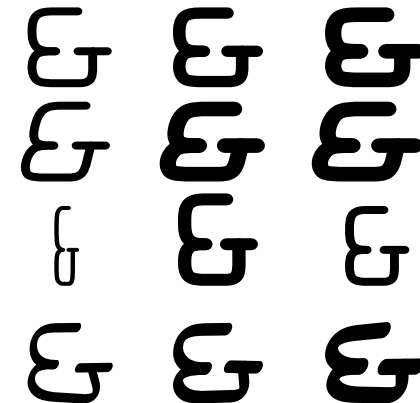
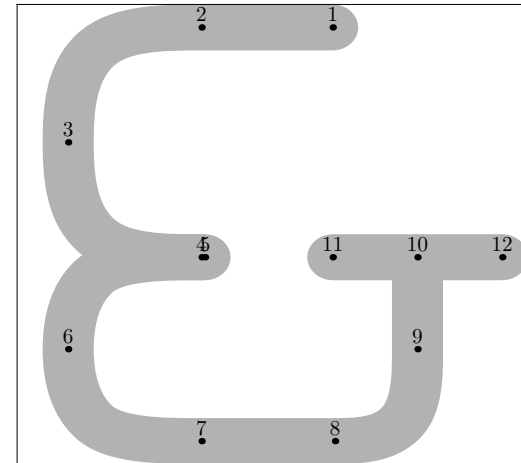


The Letter *ampersand*

```

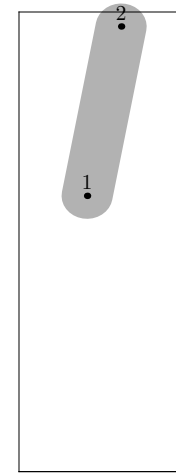
fmchar("ampersand", 15, ht#, 0);
x3 = good.x(1.5u + s + noise);
x6 = good.x(1.5u + s + noise);
rt x12 = w - eps;
x1 = .618w + noise;
x11 = .618w + noise;
x10 = .5[x11, x12] + noise;
x9 = .5[x11, x12] + noise;
x2 = .618[x9, x6] + noise;
x4 = .618[x9, x6] + noise;
x7 = .618[x9, x6] + noise;
x8 = .618[x7, x9] + noise;
x5 = x4 + .1u;
top y1 = h + .5noise;
top y2 = h + .5noise;
bot y7 = .5noise;
bot y8 = .5noise;
y4 = barheight + noise;
y11 = barheight + noise;
y12 = barheight + noise;
y3 = .5[y2, y4] + noise;
y6 = .5[y4, y7] + noise;
y9 = .5[y4, y7] + noise;
z5 = z4 + whatever * randrt;
z10 = whatever[z11, z12];
draw z1 -- z2
  & half(z2, z2 - z1, z3, -randup, z4, z5 - z4)
  & z4 -- z5;
draw half(z4, z4 - z5, z6, -randup, z7, z8 - z7)
  & z7 -- z8
  & arc(z8, z8 - z7, z9, z10 - z9)
  & z9 -- z10;
draw z11 -- z12;
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12);
endchar;

```



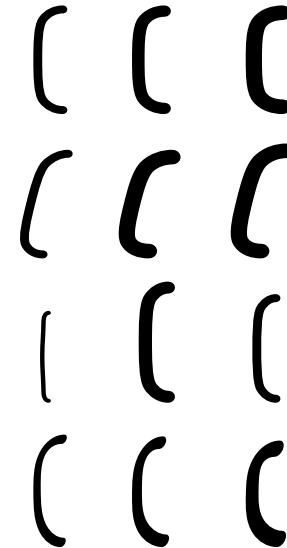
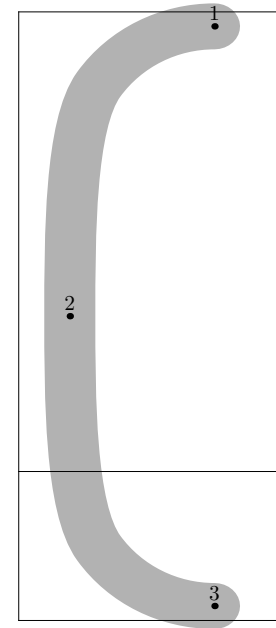
The Letter *quoteright*

```
fmchar("quoteright", 5, ht#, 0);  
 $x_1 = .4w + noise;$   
 $x_2 = .6w + noise;$   
 $top\ y_2 = h + o + noise;$   
 $y_1 = .5[barheight, x_{ht}] + noise;$   
draw  $z_1 \text{ -- } z_2;$   
 $charanchortoprighs\_ [charcode] = (.5w, h);$   
labels(1, 2);  
endchar;
```



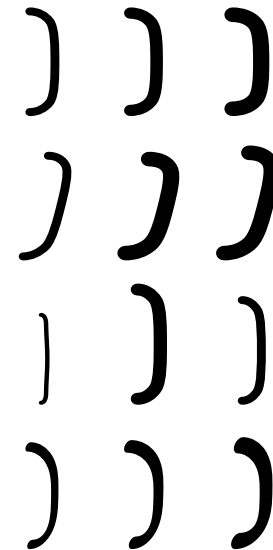
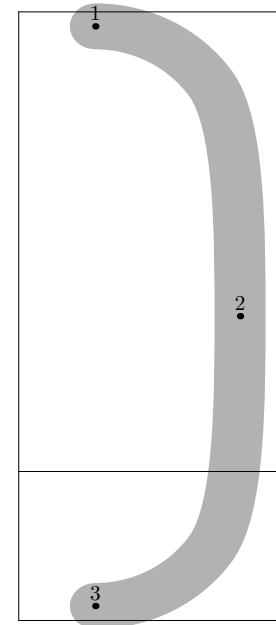
The Letter *parenleft*

```
fmchar("parenleft", 8, ht#, comma_depth#);  
x2 = good.x(1.5u + s + noise);  
w - x1 = leftstemloc - ho + noise;  
w - x3 = leftstemloc - ho + noise;  
top y1 = h + o + noise;  
bot y3 = noise - o - d;  
y2 = .5[-d, h] + noise;  
draw half(z1, -randrt, z2, -randup, z3, randrt);  
labels(1, 2, 3);  
endchar;
```



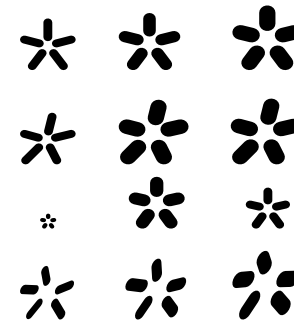
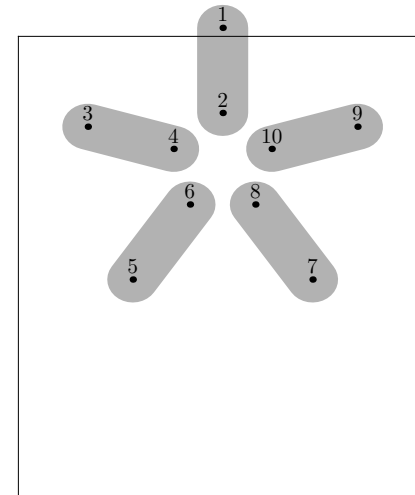
The Letter *parenright*

```
fmchar("parenright", 8, ht#, comma_depth#);  
w - x_2 = good.x(1.5u + s + noise);  
x_1 = leftstemloc - ho + noise;  
x_3 = leftstemloc - ho + noise;  
top y_1 = h + o + noise;  
bot y_3 = noise - o - d;  
y_2 = .5[-d, h] + noise;  
draw half(z_1, randrt, z_2, -randup, z_3, -randrt);  
labels(1, 2, 3);  
endchar;
```



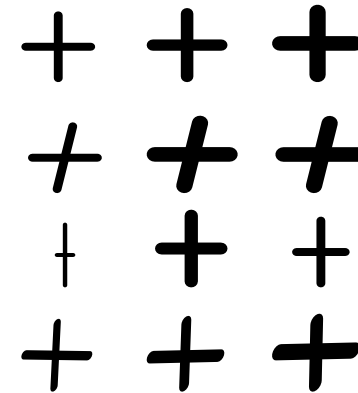
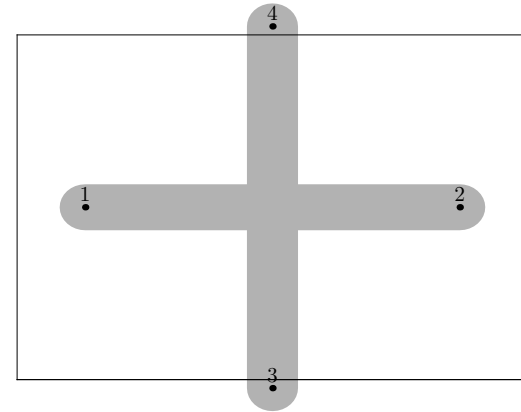
The Letter *asterisk*

```
fmchar("asterisk", 12, ht#, 0);
numeric outerradius, innerradius;
outerradius = .5w - 2u - s;
innerradius = px;
path outercircle, innercircle;
outercircle = (.5w, h + o + noise) .. (.5w, h - 2 * outerradius) ..
cycle;
innercircle = (.5w, h + o + noise - outerradius + innerradius)
.. (.5w, h + o + noise - outerradius - innerradius) .. cycle;
z1 = point 0 of outercircle + (noise, noise);
z2 = point 0 of innercircle;
z3 = point .4 of outercircle + (noise, noise);
z4 = point .4 of innercircle;
z5 = point .8 of outercircle + (noise, noise);
z6 = point .8 of innercircle;
z7 = point 1.2 of outercircle + (noise, noise);
z8 = point 1.2 of innercircle;
z9 = point 1.6 of outercircle + (noise, noise);
z10 = point 1.6 of innercircle;
draw z1 -- z2;
draw z3 -- z4;
draw z5 -- z6;
draw z7 -- z8;
draw z9 -- z10;
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
endchar;
```



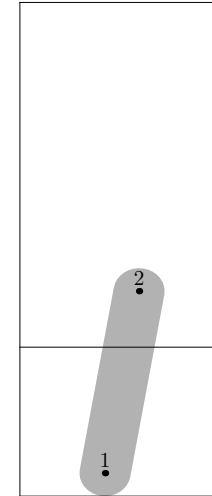
The Letter *plus*

```
fmchar("plus", 15, x_ht#, 0);  
 $x_1 = \text{good}.x(2u + s + \text{noise});$   
 $x_2 = \text{good}.x(w - 2u - s + \text{noise});$   
 $x_3 = .5w + \text{noise};$   
 $x_4 = .5w + \text{noise};$   
 $y_1 = .5h + \text{noise};$   
 $y_2 = .5h + \text{noise};$   
 $y_3 = \text{noise} - o;$   
 $y_4 = h + o + \text{noise};$   
draw  $z_1$  --  $z_2$ ;  
draw  $z_3$  --  $z_4$ ;  
labels(1, 2, 3, 4);  
endchar;
```



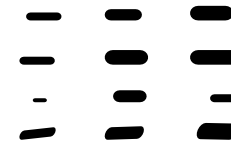
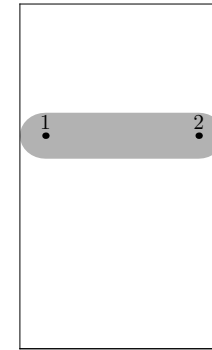
The Letter *comma*

```
fmchar("comma", 6,  $x_{ht\#}$ ,  $comma\_depth\#$ );  
 $x_1 = leftstemloc$ ;  
 $x_2 = w - x_1$ ;  
 $top\ y_2 = .382barheight$ ;  
 $bot\ y_1 = -d$ ;  
draw  $z_1 \dashrightarrow z_2$ ;  
labels(1, 2);  
endchar;
```



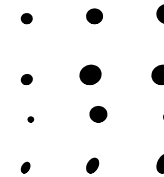
The Letter *combin*hyphen

```
fmchar("combinhyphen", 6, x_ht#, 0);  
lft x_1 = noise;  
rt x_2 = w + noise;  
y_1 = .618h + noise;  
y_2 = .618h + noise;  
draw z_1 -- z_2;  
labels(1, 2);  
endchar;
```



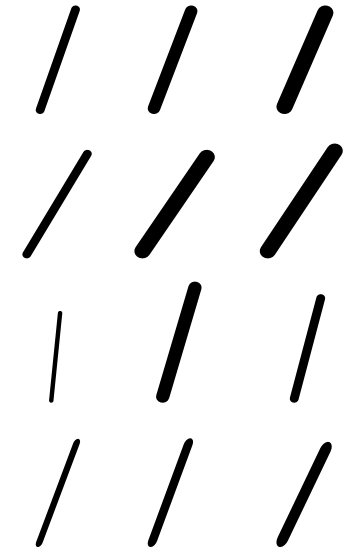
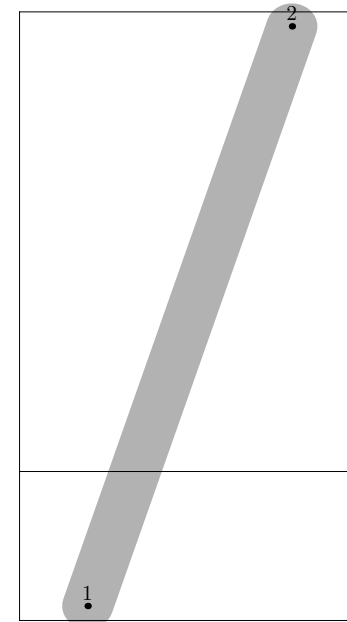
The Letter *period*

```
fmchar("period", 5, x_ht#, 0);  
 $x_1 = x_2 = .5w + noise;$   
 $bot\ y_1 = noise - o;$   
 $y_2 = y_1 + dotincr * py;$   
draw dotcircle( $z_1, z_2$ );  
labels(1, 2);  
endchar;
```



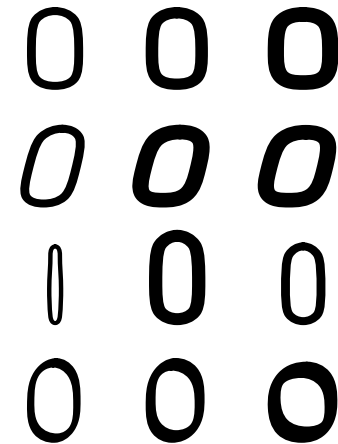
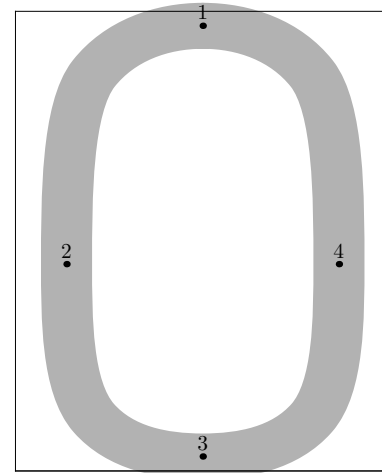
The Letter *slash*

```
fmchar("slash", 10, ht#, comma_depth#);  
 $x_1 = \text{good}.x(2u + s + \text{noise});$   
 $x_2 = \text{good}.x(w - 2u - s + \text{noise});$   
 $\text{bot } y_1 = \text{noise} - d - o;$   
 $\text{top } y_2 = h + o + \text{noise};$   
draw  $z_1 \text{ -- } z_2;$   
labels(1, 2);  
endchar;
```



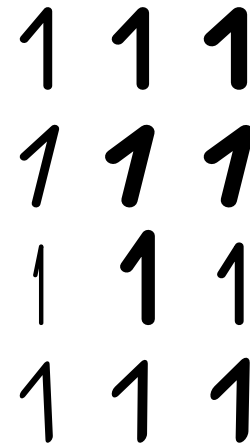
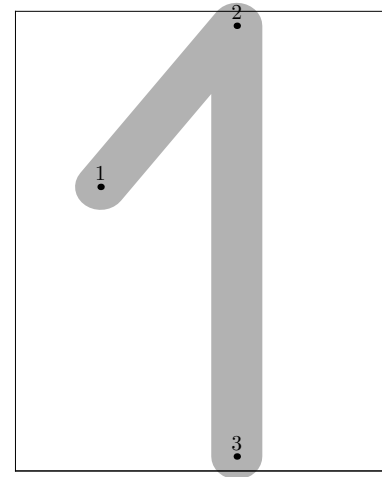
The Letter *zero*

```
fmchar("zero", 11, ht#, 0);  
 $x_1 = .5w + noise;$   
 $x_2 = good.x(1.5u + s + noise);$   
 $x_3 = .5w + noise;$   
 $w - x_4 = good.x(1.5u + s + noise);$   
 $top\ y_1 = h + o + noise;$   
 $y_2 = barheight + noise;$   
 $bot\ y_3 = noise - o;$   
 $y_4 = barheight + noise;$   
draw full( $z_1, -randrt, z_2, -randup, z_3, randrt, z_4, randup$ );  
labels(1, 2, 3, 4);  
endchar;
```



The Letter *one*

```
fmchar("one", 11, ht#, 0);  
 $x_1 = \text{leftstemloc} + \text{noise};$   
 $w - x_2 = \text{good}.x(4.5u + s + \text{noise});$   
 $w - x_3 = \text{good}.x(4.5u + s + \text{noise});$   
 $y_1 = .618h + \text{noise};$   
 $\text{top } y_2 = h + o + \text{noise};$   
 $\text{bot } y_3 = \text{noise} - o;$   
draw  $z_1$  --  $z_2$  --  $z_3$ ;  
labels(1, 2, 3);  
endchar;
```

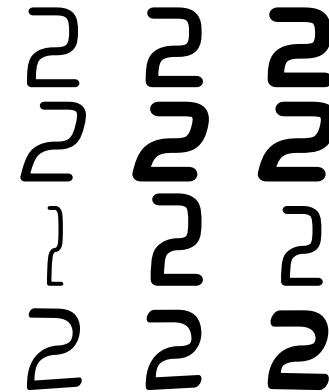
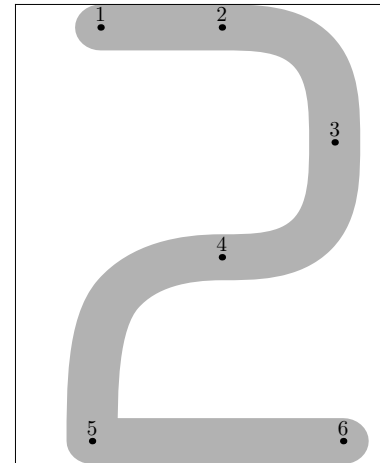


The Letter *two*

```

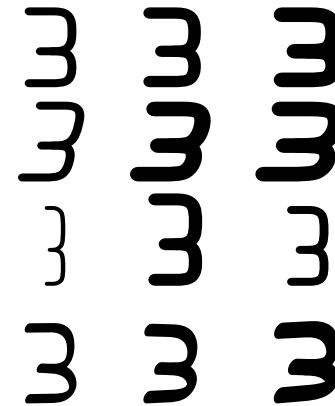
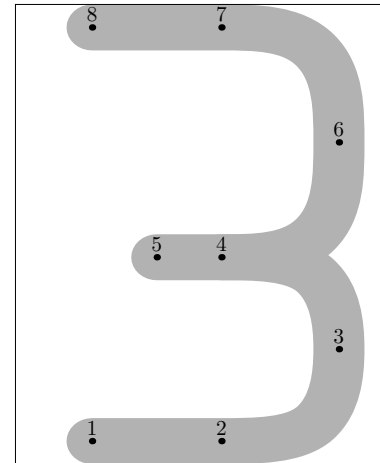
fmchar("two", 11, ht#, 0);
x1 = leftstemloc + noise;
x2 = .5[x1, x6] + noise;
x3 = .5[w - x1, lft w] + noise;
x4 = .5[x1, x6] + noise;
x5 = leftstemloc - ho + noise;
x6 = .5[w - x1, lft w] + ho + noise;
top y2 = h + noise;
y3 = .5[y4, y2] + noise;
y4 = barheight + noise;
bot y5 = noise;
bot y6 = noise;
z1 = z2 + whatever * randrt;
pair randir;
randir := -randrt;
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, randir)
    & arc(z4, randir, z5, -randup)
    & z5 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;

```



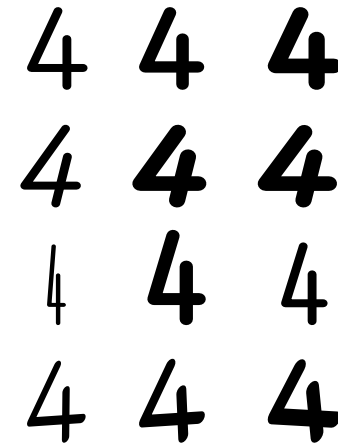
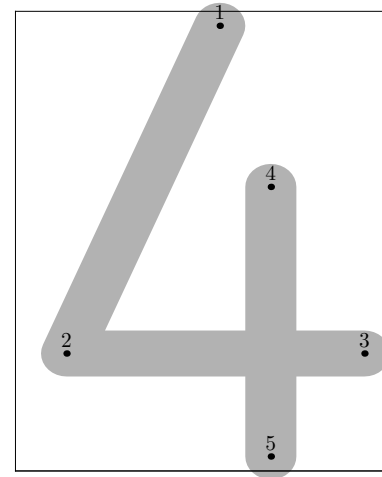
The Letter *three*

```
fmchar("three", 11, ht#, 0);
x1 = leftstemloc - ho + noise;
x8 = leftstemloc - ho + noise;
x3 = good.x(w - 1.5u + s + noise);
x6 = good.x(w - 1.5u + s + noise);
x5 = .5[x1, x2] + noise;
x2 = .55w + noise;
x4 = .55w + noise;
x7 = .55w + noise;
bot y1 = noise;
bot y2 = noise;
top y7 = h + noise;
top y8 = h + noise;
y4 = barheight + .5noise;
y5 = barheight + .5noise;
y3 = .5[y2, y4] + noise;
y6 = .5[y4, y7] + noise;
draw z1 -- z2
    & half(z2, z2 - z1, z3, randup, z4, z5 - z4)
    & z4 -- z5;
draw half(z4, z4 - z5, z6, randup, z7, z8 - z7)
    & z7 -- z8;
labels(1, 2, 3, 4, 5, 6, 7, 8);
endchar;
```



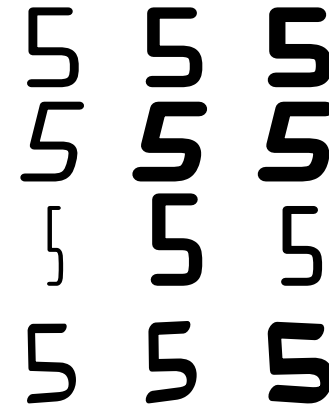
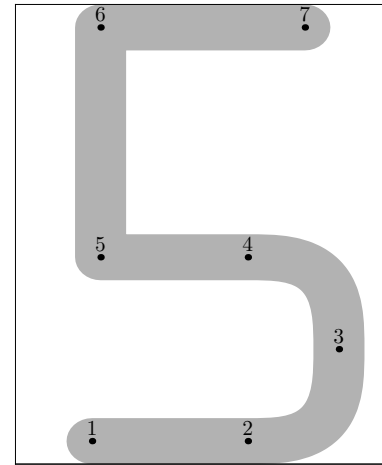
The Letter *four*

```
fmchar("four", 11, ht#, 0);
x2 = good.x(1.5u + s + noise);
rt x3 = w - eps + noise;
w - x4 = good.x(3.5u + s + noise);
w - x5 = good.x(3.5u + s + noise);
rt x1 = lft x4 + noise;
y4 = .618h + noise;
top y1 = h + o + noise;
bot y5 = noise - o;
y2 = .618[y4, y5] + noise;
y3 = .618[y4, y5] + noise;
draw z1 -- z2 -- z3;
draw z4 -- z5;
labels(1, 2, 3, 4, 5);
endchar;
```



The Letter *five*

```
fmchar("five", 11, ht#, 0);
x5 = leftstemloc + noise;
x6 = leftstemloc + noise;
x7 = w - x5 + noise;
x1 = x5 - ho + noise;
x3 = .5[w - x1, lft w] + noise;
x2 = .618[x5, x3] + noise;
x4 = .618[x5, x3] + noise;
bot y1 = noise;
bot y2 = noise;
top y6 = h + noise;
top y7 = h + noise;
y4 = barheight + .5noise;
y5 = barheight + .5noise;
y3 = .5[y2, y4] + noise;
draw z1 -- z2
    & half(z2, z2 - z1, z3, randup, z4, z5 - z4)
    & z4 -- z5 -- z6 -- z7;
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```

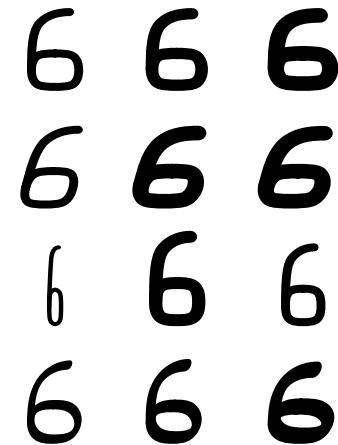
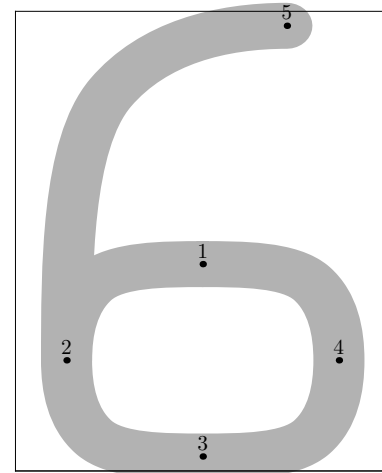


The Letter *six*

```

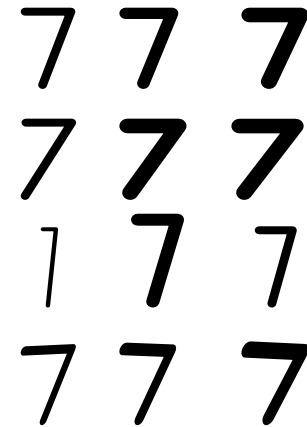
fmchar("six", 11, ht#, 0);
 $x_1 = .5w + noise;$ 
 $x_2 = good.x(1.5u + s + noise);$ 
 $x_3 = .5w + noise;$ 
 $w - x_4 = good.x(1.5u + s + noise);$ 
 $x_5 = .618[x_1, x_4] + noise;$ 
 $y_1 = barheight + noise;$ 
 $y_2 = .5[y_1, y_3] + noise;$ 
 $bot\ y_3 = noise - o;$ 
 $y_4 = .5[y_1, y_3] + noise;$ 
 $top\ y_5 = h + o;$ 
pair randir;
 $randir := -randup;$ 
draw full( $z_1$ ,  $-randrt$ ,  $z_2$ , randir,  $z_3$ , randrt,  $z_4$ , randup);
draw arc( $z_5$ ,  $-randrt$ ,  $z_2$ , randir);
labels(1, 2, 3, 4, 5);
endchar;

```



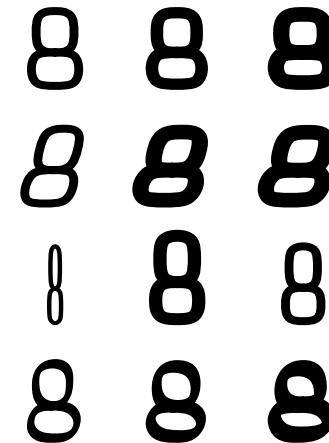
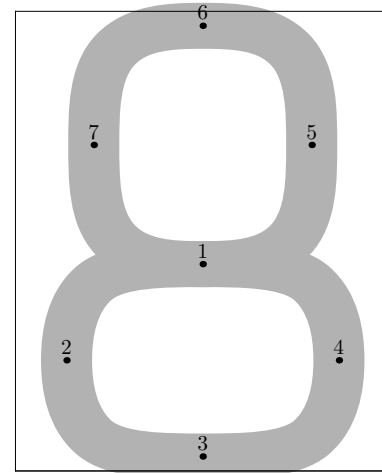
The Letter *seven*

```
fmchar("seven", 11, ht#, 0);  
 $x_1 = leftstemloc + noise;$   
 $rt\ x_2 = w - eps + noise;$   
 $x_3 = .618[x_2, x_1] + noise;$   
 $top\ y_1 = h + noise;$   
 $top\ y_2 = h + noise;$   
 $bot\ y_3 = noise - o;$   
draw  $z_1$  --  $z_2$  --  $z_3$ ;  
labels(1, 2, 3);  
endchar;
```



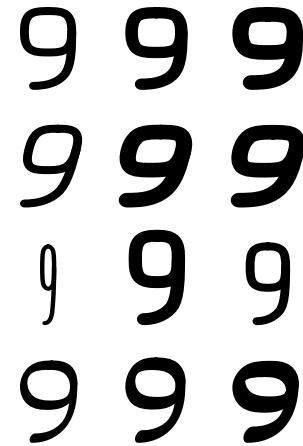
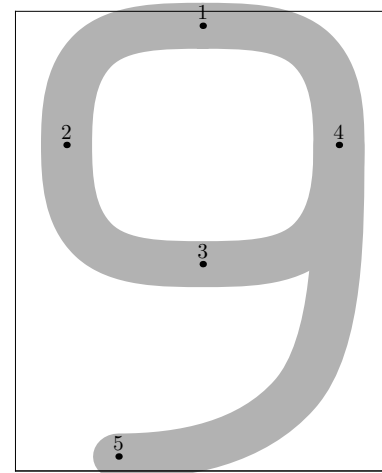
The Letter *eight*

```
fmchar("eight", 11, ht#, 0);
x1 = .5w + noise;
x3 = .5w + noise;
x6 = .5w + noise;
x2 = good.x(1.5u + s + noise);
w - x4 = good.x(1.5u + s + noise);
x7 = .2[x2, x1] + noise;
w - x5 = .2[x2, x1] + noise;
y1 = barheight + noise;
bot y3 = noise - o;
top y6 = h + o + noise;
y2 = .5[y1, y3] + noise;
y4 = .5[y1, y3] + noise;
y7 = .5[y1, y6] + noise;
z5 = z7 + whatever * (z4 - z2);
pair randir;
randir := randrt;
draw full(z1, -randir, z2, -randup, z3, randrt, z4, randup);
draw full(z1, randir, z5, randup, z6, -randrt, z7, -randup);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```



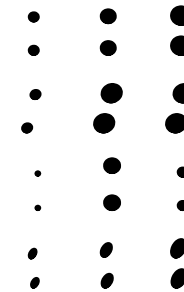
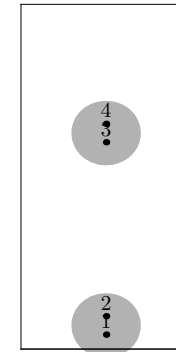
The Letter *nine*

```
fmchar("nine", 11, ht#, 0);
 $x_1 = .5w + noise;$ 
 $x_2 = good.x(1.5u + s + noise);$ 
 $x_3 = .5w + noise;$ 
 $w - x_4 = good.x(1.5u + s + noise);$ 
 $x_5 = .618[x_1, x_2] + noise;$ 
 $top\ y_1 = h + o + noise;$ 
 $y_2 = .5[y_1, y_3] + noise;$ 
 $y_4 = .5[y_1, y_3] + noise;$ 
 $bot\ y_5 = noise - o;$ 
 $y_3 = barheight + noise;$ 
pair randir;
randir := randup;
draw full( $z_1$ , -randrt,  $z_2$ , -randup,  $z_3$ , randrt,  $z_4$ , randir);
draw arc( $z_5$ , randrt,  $z_4$ , randir);
labels(1, 2, 3, 4, 5);
endchar;
```



The Letter *colon*

```
fmchar("colon", 5, x_ht#, 0);
x1 = x2 = .5w + noise;
x3 = x4 = .5w + noise;
bot y1 = noise - o;
y2 = y1 + dotincr * py;
y3 = y4 - dotincr * py = barheight + noise;
draw dotcircle(z1, z2);
draw dotcircle(z3, z4);
labels(1, 2, 3, 4);
endchar;
```

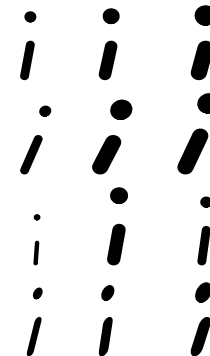
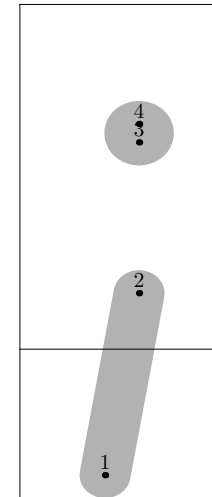


The Letter *semicolon*

```

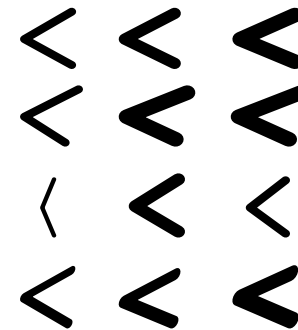
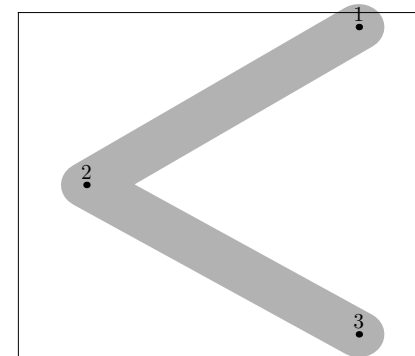
fmchar("semicolon", 6, x_ht#, comma_depth#);
 $x_1 = leftstemloc + noise;$ 
 $w - x_2 = leftstemloc + noise;$ 
 $w - x_3 = w - x_4 = leftstemloc + noise;$ 
 $y_3 = y_4 - dotincr * py = barheight;$ 
 $top\ y_2 = .382y_3;$ 
 $bot\ y_1 = -d;$ 
draw  $z_1$  --  $z_2$ ;
draw dotcircle( $z_3$ ,  $z_4$ );
labels(1, 2, 3, 4);
endchar;

```



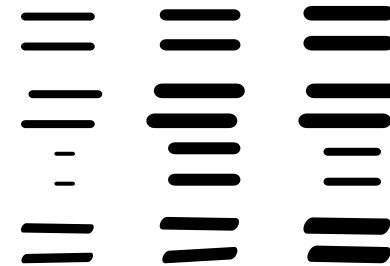
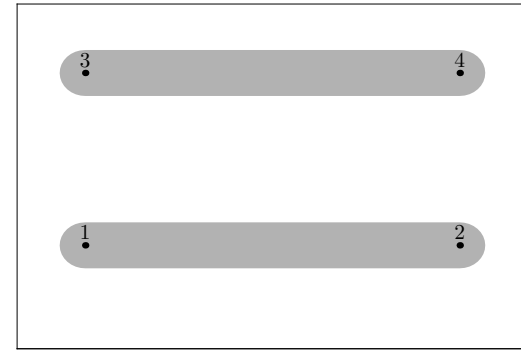
The Letter *less*

```
fmchar("less", 12, x_ht#, 0);  
x1 = good.x(w - 2u - s + noise);  
x2 = good.x(2u + s + noise);  
x3 = good.x(w - 2u - s + noise);  
top y1 = h + o + noise;  
bot y3 = noise;  
y2 = .5h + noise;  
draw z1 -- z2 -- z3;  
labels(1, 2, 3);  
endchar;
```



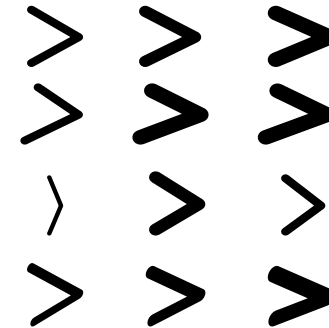
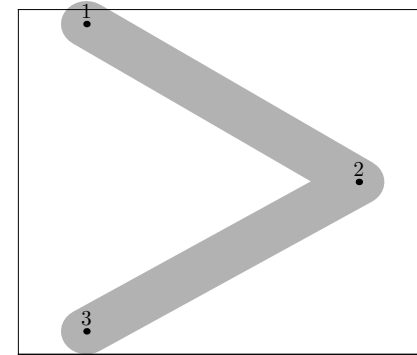
The Letter *equal*

```
fmchar("equal", 15, x_ht#, 0);  
 $x_1 = \text{good}.x(2u + s + \text{noise});$   
 $x_2 = \text{good}.x(w - 2u - s + \text{noise});$   
 $x_3 = \text{good}.x(2u + s + \text{noise});$   
 $x_4 = \text{good}.x(w - 2u - s + \text{noise});$   
 $y_1 = .3h + \text{noise};$   
 $y_2 = .3h + \text{noise};$   
 $y_3 = .8h + \text{noise};$   
 $y_4 = .8h + \text{noise};$   
draw  $z_1$  --  $z_2$ ;  
draw  $z_3$  --  $z_4$ ;  
labels(1, 2, 3, 4);  
endchar;
```



The Letter *greater*

```
fmchar("greater", 12, x_ht#, 0);  
x1 = good.x(2u + s + noise);  
x2 = good.x(w - 2u - s + noise);  
x3 = good.x(2u + s + noise);  
top y1 = h + o + noise;  
bot y3 = noise;  
y2 = .5h + noise;  
draw z1 -- z2 -- z3;  
labels(1, 2, 3);  
endchar;
```

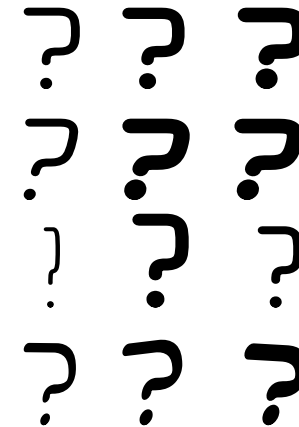
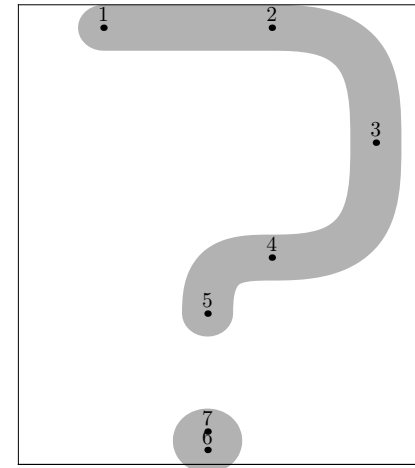


The Letter *question*

```

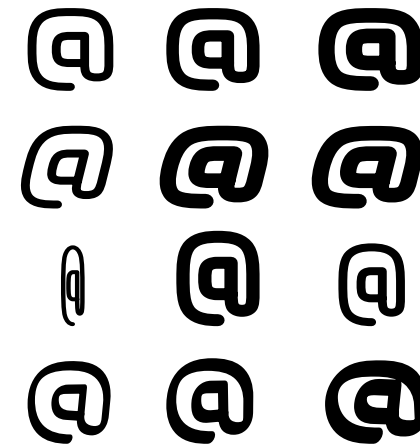
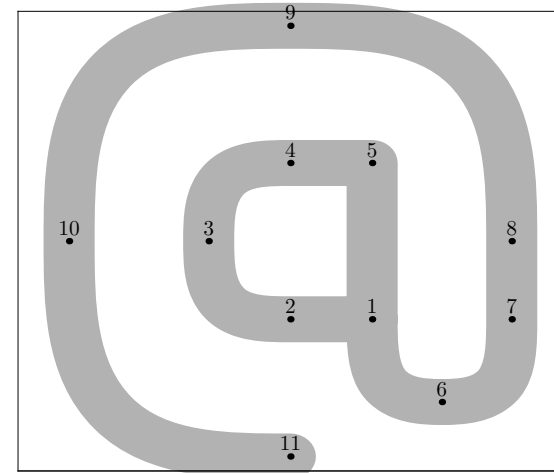
fmchar("question", 12, ht#, 0);
x1 = leftstemloc + noise;
w - x3 = good.x(1.5u + s + noise);
x5 = .618[x3, x1] + noise;
x2 = .618[x1, x3] + noise;
x4 = .618[x1, x3] + noise;
x6 = x7 = .618[x3, x1] + noise;
top y1 = h + noise;
top y2 = h + noise;
y4 = barheight + noise;
y3 = .5[y2, y4] + noise;
bot y6 = noise - o;
y7 = y6 + dotincr * py;
bot y5 = max(.618y4, top y7 + eps) + noise;
pair randir;
randir := -randrt;
draw z1 -- z2
    & half(z2, z2 - z1, z3, -randup, z4, randir)
    & arc(z4, randir, z5, -randup);
draw dotcircle(z6, z7);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;

```



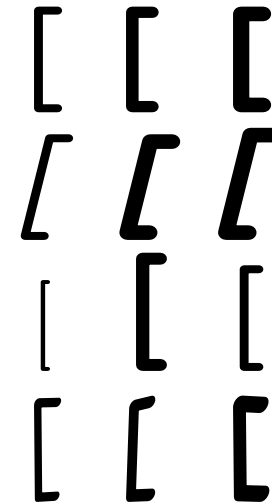
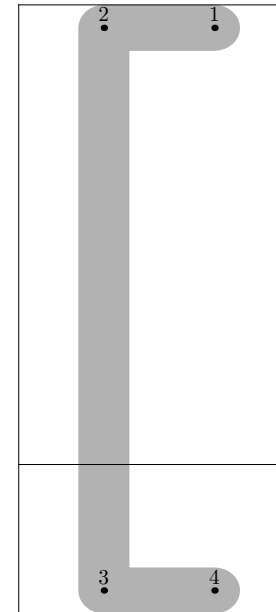
The Letter *at*

```
fmchar("at", 16, ht#, 0);
x10 = good.x(1.5u + s + noise);
w - x8 = good.x(1.5u + s + noise);
w - x7 = 1.5u + s + noise;
x2 = .5w + noise;
x4 = .5w + .5noise;
x9 = .5w + noise;
x11 = .5w + noise;
x1 = .65w + noise;
x5 = .65w + .5noise;
x3 = .35w + noise;
x6 = .5[x1, x7];
top y9 = h + o + noise;
bot y11 = noise - o;
y8 = .5h + noise;
y10 = .5h + noise;
y3 = .5h + noise;
y1 = .33h + noise;
y2 = .33h + noise;
y7 = .33h + noise;
y4 = .67h + .5noise;
y5 = .67h + .5noise;
y6 = .15h + noise;
pair randir;
randir = -randup;
draw z1 -- z2
  & half(z2, z2 - z1, z3, randup, z4, z5 - z4)
  & z4 -- z5 -- z1
  & half(z1, z1 - z5, z6, randrt, z7, z8 - z7)
  & z7 -- z8
  & half(z8, z8 - z7, z9, -randrt, z10, randir)
  & arc(z10, randir, z11, randrt);
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11);
endchar;
```



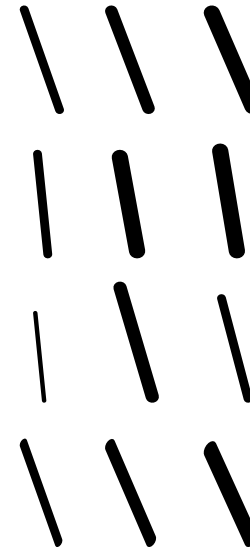
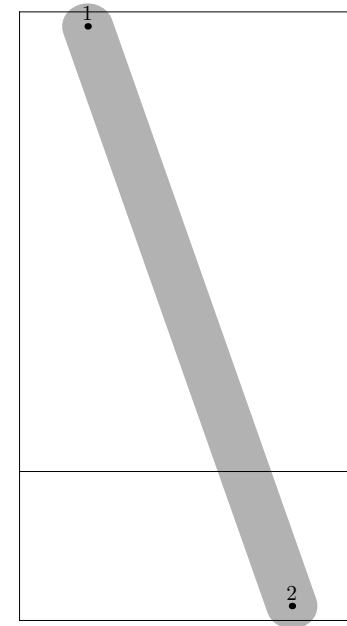
The Letter *bracketleft*

```
fmchar("bracketleft", 8, ht#, comma_depth#);
x2 = leftstemloc + noise;
x3 = leftstemloc + noise;
w - x1 = leftstemloc - ho + noise;
w - x4 = leftstemloc - ho + noise;
top y1 = h + noise;
top y2 = h + noise;
bot y3 = noise - d;
bot y4 = noise - d;
draw z1 -- z2 -- z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



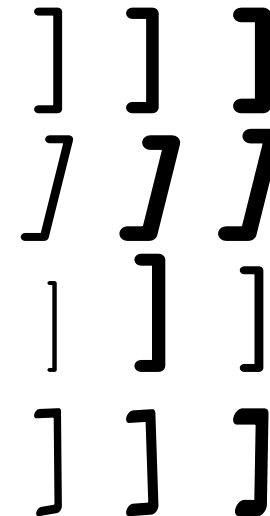
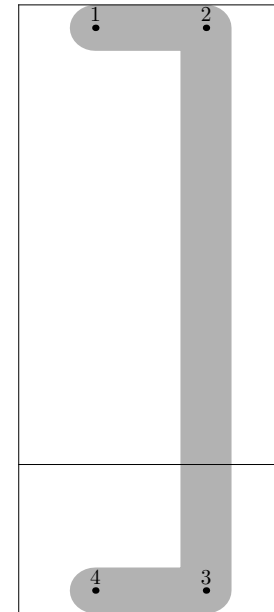
The Letter *backslash*

```
fmchar("backslash", 10, ht#, comma_depth#);  
 $x_1 = \text{good}.x(2u + s + \text{noise});$   
 $x_2 = \text{good}.x(w - 2u - s + \text{noise});$   
 $\text{bot } y_2 = \text{noise} - d - o;$   
 $\text{top } y_1 = h + o + \text{noise};$   
draw  $z_1 \dashrightarrow z_2;$   
labels(1, 2);  
endchar;
```



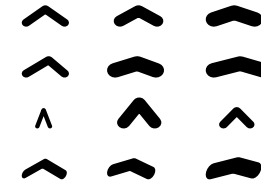
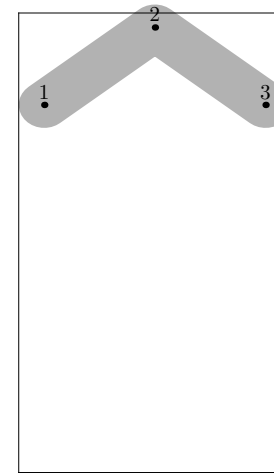
The Letter *bracketright*

```
fmchar("bracketright", 8, ht#, comma_depth#);
w - x2 = leftstemloc + noise;
w - x3 = leftstemloc + noise;
x1 = leftstemloc - ho + noise;
x4 = leftstemloc - ho + noise;
top y1 = h + noise;
top y2 = h + noise;
bot y3 = noise - d;
bot y4 = noise - d;
draw z1 -- z2 -- z3 -- z4;
labels(1, 2, 3, 4);
endchar;
```



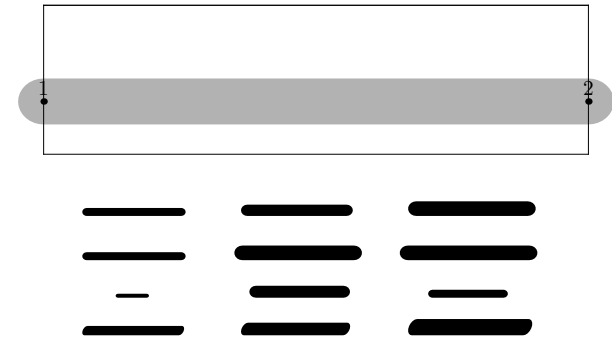
The Letter *asciicircum*

```
fmchar("asciicircum", 8, ht#, 0);
lft x1 = eps + noise;
x2 = .5w + noise;
rt x3 = w - eps + noise;
bot y1 = x_ht + noise;
bot y3 = x_ht + noise;
top y2 = h + o + noise;
draw z1 -- z2 -- z3;
labels(1, 2, 3);
endchar;
```



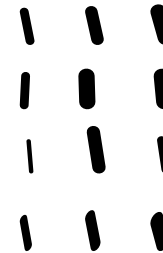
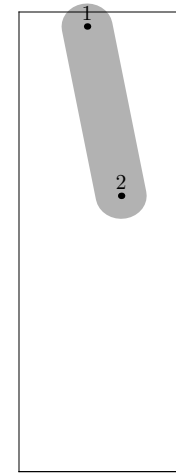
The Letter *underscore*

```
fmchar("underscore", 16, 0, comma_depth#);  
 $x_1 = 0;$   
 $x_2 = w;$   
 $bot\ y_1 = -.8d;$   
 $bot\ y_2 = -.8d;$   
draw  $z_1 \dashrightarrow z_2;$   
labels(1, 2);  
endchar;
```



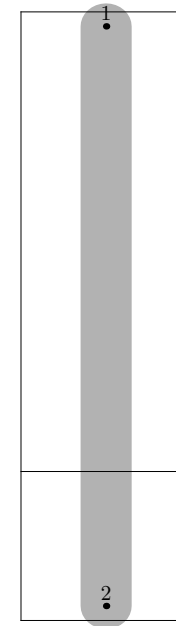
The Letter *quoteleft*

```
fmchar("quoteleft", 5, ht#, 0);  
 $x_1 = .4w + noise;$   
 $x_2 = .6w + noise;$   
 $top\ y_1 = h + o + noise;$   
 $y_2 = .5[barheight, x_{ht}] + noise;$   
draw  $z_1$  --  $z_2$ ;  
labels(1, 2);  
endchar;
```



The Letter *bar*

```
fmchar("bar", 5, ht#, comma_depth#);  
 $x_1 = .5w + noise;$   
 $x_2 = .5w + noise;$   
 $top\ y_1 = h + o + noise;$   
 $bot\ y_2 = noise - d - o;$   
draw  $z_1$  --  $z_2$ ;  
labels(1, 2);  
endchar;
```

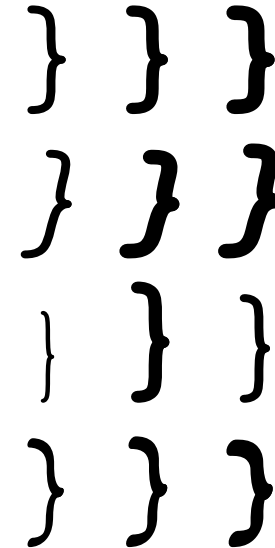
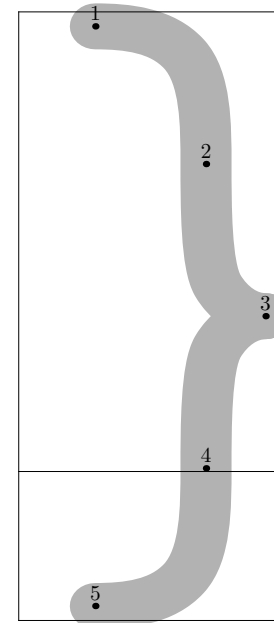


The Letter *braceright*

```

finchar("braceright", 8, ht#, comma_depth#);
x1 = leftstemloc - ho + noise;
x5 = leftstemloc - ho + noise;
w - x2 = leftstemloc + noise;
w - x4 = leftstemloc + noise;
rt x3 = w - eps + noise;
top y1 = h + o + noise;
bot y5 = noise - o - d;
y3 = .5[-d, h] + noise;
y2 = .75[-d, h] + noise;
y4 = .25[-d, h] + noise;
pair randira;
randira = randrt;
draw half(z1, randrt, z2, -randup, z3, randira);
draw half(z3, -randira, z4, -randup, z5, -randrt);
labels(1, 2, 3, 4, 5);
endchar;

```

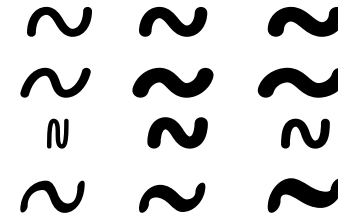
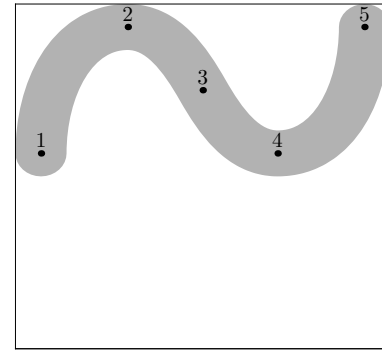


The Letter *asciitilde*

```

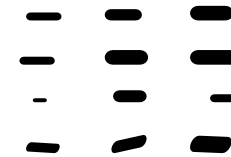
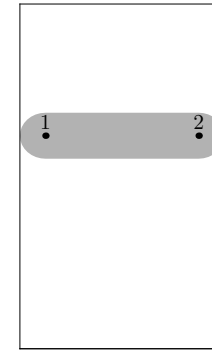
fmchar("asciitilde", 11,  $x_{ht\#}$ , 0);
 $lft\ x_1 = eps + noise$ ;
 $x_2 = .3w + noise$ ;
 $x_4 = .7w + noise$ ;
 $x_3 = .5w + noise$ ;
 $rt\ x_5 = w - eps + noise$ ;
 $bot\ y_1 = .5h + noise$ ;
 $bot\ y_4 = .5h + noise$ ;
 $top\ y_2 = h + noise$ ;
 $top\ y_5 = h + noise$ ;
 $y_3 = .75h + noise$ ;
if angle direction 1 of ( $z_2\{right\} \dots z_3 \dots z_4\{right\}$ )  $< -90$ :
  draw  $z_1\{randup\} \dots z_2\{randrt\}$ 
     $\dots z_3\{-randup\} \dots z_4\{randrt\} \dots z_5\{randup\}$ ;
else:
  draw  $z_1\{randup\} \dots z_2\{randrt\}$ 
     $\dots z_3 \dots z_4\{randrt\} \dots z_5\{randup\}$ ;
fi
labels(1, 2, 3, 4, 5);
endchar;

```



The Letter *hyphen*

```
fmchar("hyphen", 6, x_ht#, 0);  
lft x_1 = noise;  
rt x_2 = w + noise;  
y_1 = .618h + noise;  
y_2 = .618h + noise;  
draw z_1 -- z_2;  
labels(1, 2);  
endchar;
```

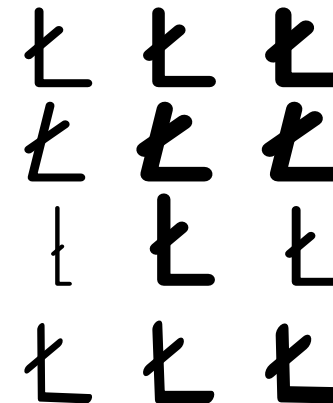
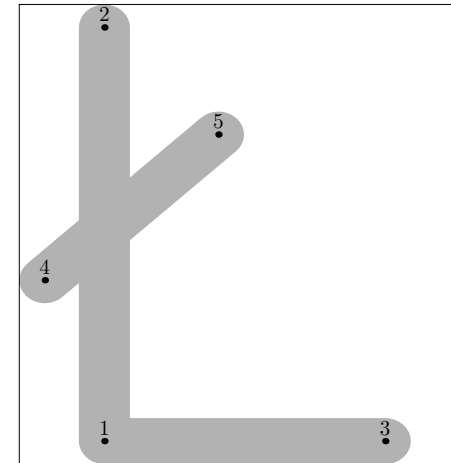


The Letter *Lslash*

```

fmchar("Lslash", 13, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
w - x3 = leftstemloc - ho + noise;
lft x4 = eps + noise;
x5 = .45w + noise;
bot y1 = noise;
bot y3 = noise;
top y2 = h + noise;
y4 = .4h + noise;
z5 = z4 + whatever * dir(40);
draw z3 -- z1 -- z2;
draw z4 -- z5;
charanchortops_[charcode] = (leftstemloc, h);
charanchortoprights_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5);
endchar;

```

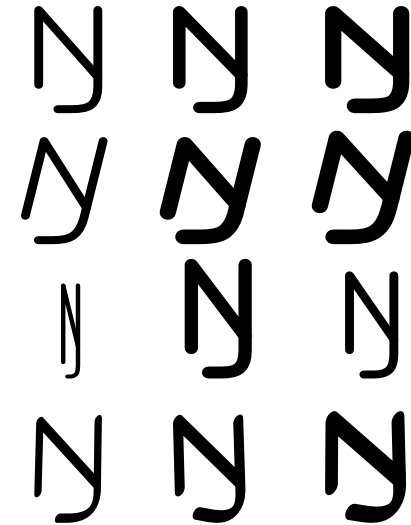
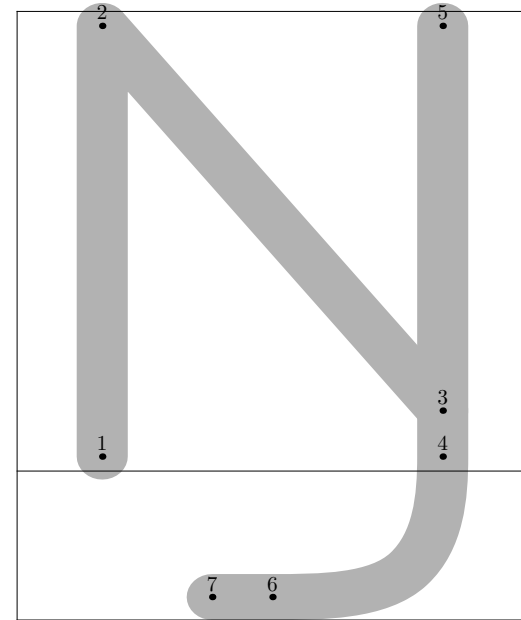


The Letter *Eng*

```

fmchar("Eng", 15, ht#, acc_depth#);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x4 = w - leftstemloc + noise;
x5 = w - leftstemloc + noise;
x6 = .5w + noise;
x7 = .382w + noise;
bot y1 = noise - o;
top y2 = h + o + noise;
y3 = y4 + ygap + noise;
bot y4 = noise - o;
top y5 = h + o + noise;
bot y6 = noise - d;
bot y7 = noise - d;
z3 = whatever[z4, z5];
draw z1 -- z2 -- z3;
draw z7 -- z6
    & arc(z6, z6 - z7, z4, z5 - z4)
    & z4 -- z5;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;

```

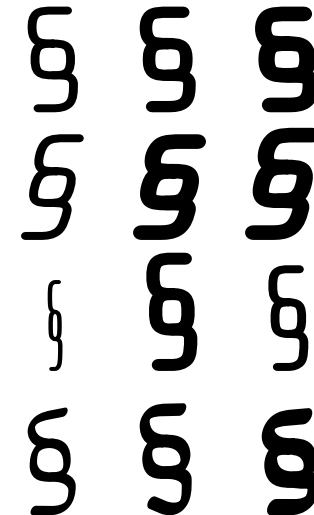
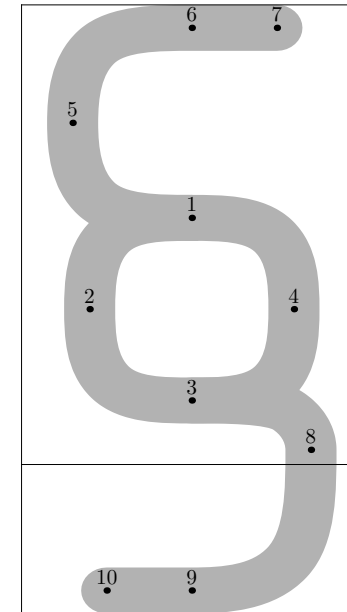


The Letter *section*

```

fmchar("section", 10, ht#, comma_depth#);
x1 = .5w + noise;
x2 = good.x(2u + s + noise);
x3 = .5w + noise;
w - x4 = good.x(2u + s + noise);
x5 = good.x(1.5u + s + noise);
x6 = .5w + noise;
w - x7 = leftstemloc + noise;
w - x8 = good.x(1.5u + s + noise);
x9 = .5w + noise;
x10 = leftstemloc + noise;
y1 = .65[-d, h] + noise;
y2 = .5[-d, h] + noise;
y3 = .35[-d, h] + noise;
y4 = .5[-d, h] + noise;
y5 = .5[y1, y6] + noise;
top y6 = h + noise;
top y7 = h + noise;
y8 = .5[y4, y9] + noise;
bot y9 = noise - d;
bot y10 = noise - d;
pair randira, randirb;
randira = -randrt;
randirb = randrt;
draw full(z1, randira, z2, -randup, z3, randirb, z4, randup);
draw half(z1, randira, z5, randup, z6, z7 - z6) & z6 -- z7;
draw half(z3, randirb, z8, -randup, z9, z10 - z9) & z9 -- z10;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
endchar;

```

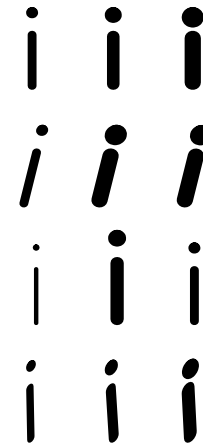
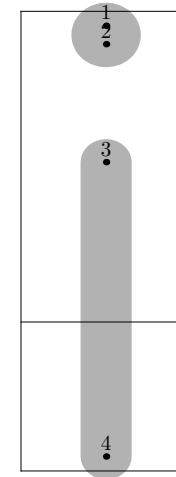


The Letter *exclamdown*

```

fmchar("exclamdown", 5, ht#-comma_depth#, comma_depth#);
x1 = x2 = .5w + noise;
x3 = .5w + noise;
x4 = .5w + noise;
top y1 = h + o + noise;
y2 = y1 - dotincr * py;
bot y4 = noise - d - o;
top y3 = min(h - .618barheight, bot y2 - eps) + noise;
draw dotcircle(z1, z2);
draw z3 -- z4;
labels(1, 2, 3, 4);
endchar;

```

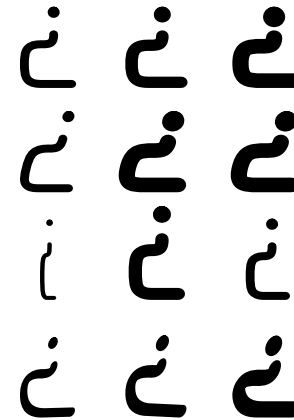
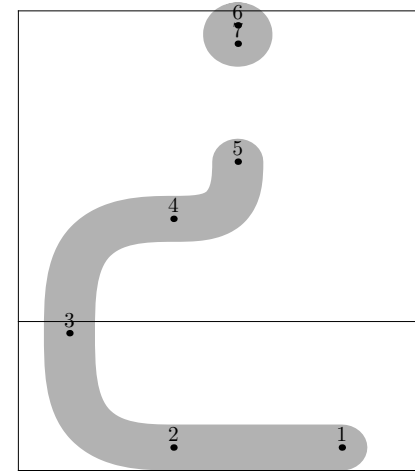


The Letter *questiondown*

```

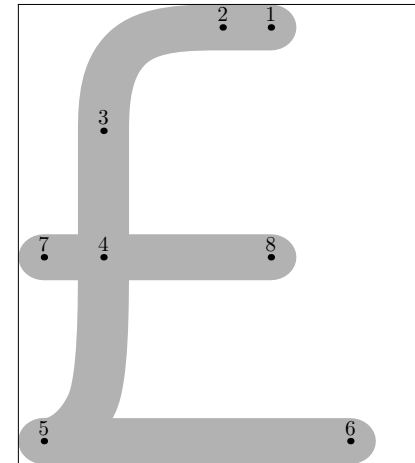
fmchar("questiondown", 12, ht#-comma_depth#, comma_depth#);
w - x_1 = leftstemloc + noise;
x_3 = good.x(1.5u + s + noise);
x_5 = .618[x_3, x_1] + noise;
x_2 = .618[x_1, x_3] + noise;
x_4 = .618[x_1, x_3] + noise;
x_6 = x_7 = .618[x_3, x_1] + noise;
bot y_1 = noise - d;
bot y_2 = noise - d;
top y_6 = h + o + noise;
y_7 = y_6 - dotincr * py;
top y_5 = min(h - .618barheight, bot y_7 - eps) + noise;
y_4 = .8[y_2, y_5] + noise;
y_3 = .5[y_2, y_4] + noise;
pair randir;
randir := -randrt;
draw arc(z_5, -randup, z_4, randir)
    & half(z_4, randir, z_3, -randup, z_2, z_1 - z_2)
    & z_2 -- z_1;
draw dotcircle(z_6, z_7);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;

```



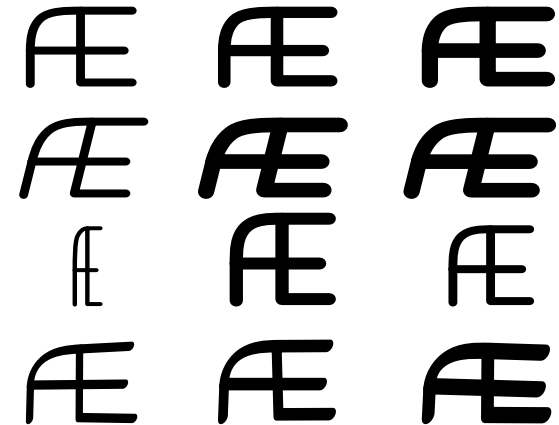
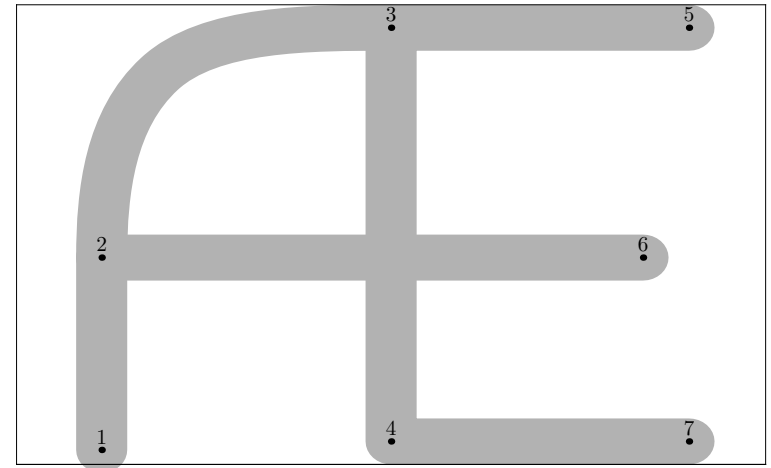
The Letter *sterling*

```
fmchar("sterling", 12, ht#, 0);
x3 = leftstemloc + noise;
x4 = leftstemloc + noise;
w - x6 = leftstemloc - ho + noise;
lft x5 = eps + noise;
lft x7 = eps + noise;
x1 = .618w + noise;
x8 = .618w + noise;
x2 = .5w + noise;
top y1 = h + noise;
bot y5 = noise;
bot y6 = noise;
y7 = barheight + noise;
y8 = barheight + noise;
y4 = barheight + noise;
y3 = .5[barheight, h] + noise;
z2 = z1 + whatever * randir;
draw z1 -- z2
  & arc(z2, z2 - z1, z3, z4 - z3)
  & z3 -- z4
  & arc(z4, z4 - z3, z5, z5 - z6);
draw z5 -- z6;
draw z7 -- z8;
labels(1, 2, 3, 4, 5, 6, 7, 8);
endchar;
```



The Letter *Æ*

```
fmchar("AE", 22, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = .5w + noise;
x4 = .5w + noise;
x5 = w - leftstemloc + o + noise;
x6 = w - leftstemloc + o - xgap + noise;
x7 = w - leftstemloc + o + noise;
bot y1 = noise - o;
y2 = barheight + noise;
top y3 = h + noise;
bot y4 = noise;
top y5 = h + noise;
y6 = barheight + noise;
bot y7 = noise;
draw z1 -- z2;
draw arc(z2, z2 - z1, z3, z5 - z3);
draw z2 -- z6;
draw z5 -- z3 -- z4 -- z7;
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```

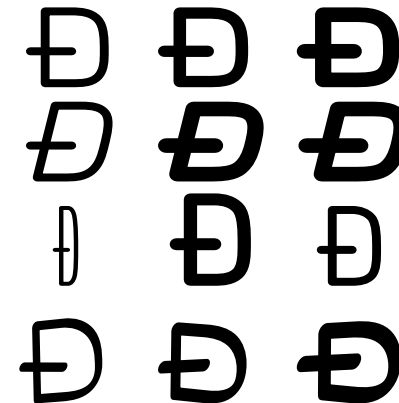
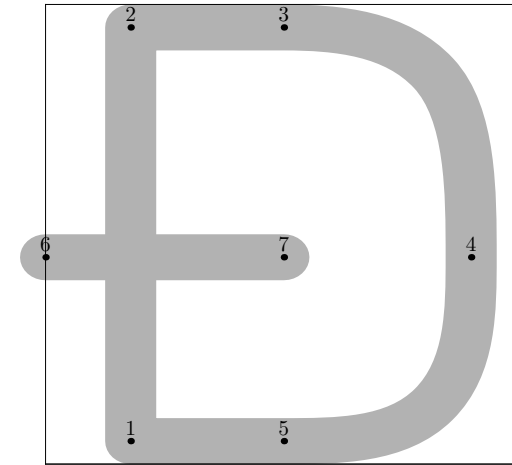


The Letter *Eth*

```

fmchar("Eth", 14, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = .5w + noise;
x5 = .5w + noise;
w - x4 = good.x(1.5u + s + noise);
x6 = eps + noise;
x7 = .5w + noise;
bot y1 = noise;
bot y5 = noise;
top y2 = h + noise;
top y3 = h + noise;
y4 = barheight + noise;
y6 = barheight + noise;
y7 = barheight + noise;
draw z1 -- z2 -- z3
    & half(z3, z3 - z2, z4, -randup, z5, z1 - z5)
    & z5 -- cycle;
draw z6 -- z7;
charanchortops_[charcode] = (.5w, h);
labels(1, 2, 3, 4, 5, 6, 7);
endchar;

```

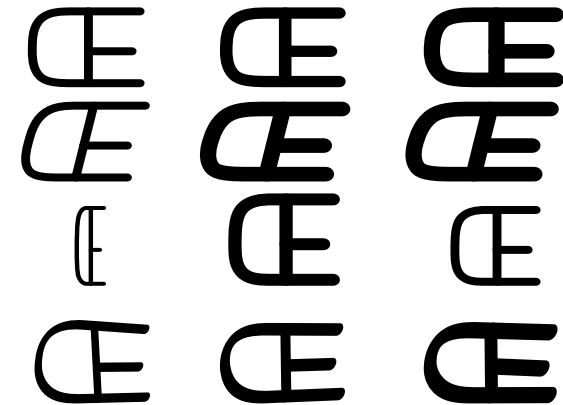
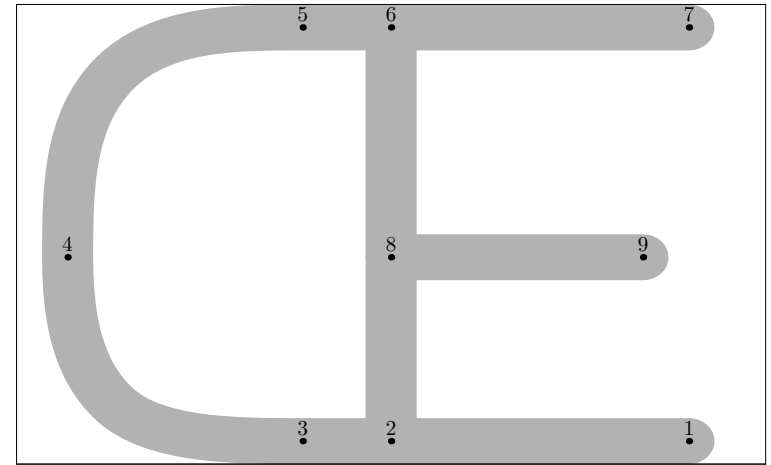


The Letter *OE*

```

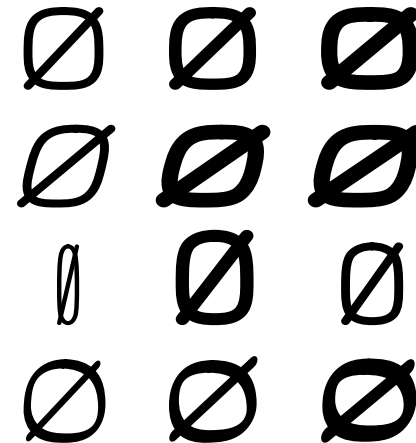
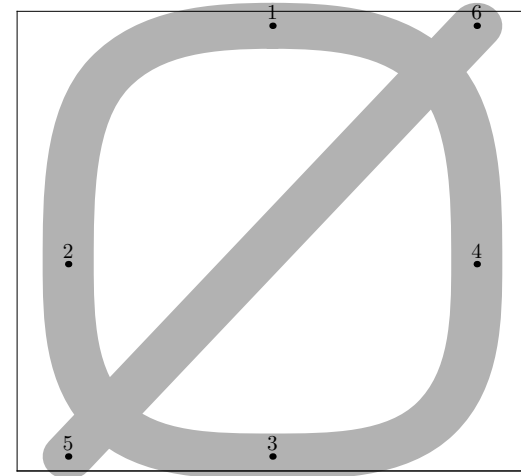
fmchar("OE", 22, ht#, 0);
x2 = .5w + noise;
x4 = good.x(1.5u + s + noise);
x6 = .5w + noise;
x7 = w - leftstemloc + o + noise;
x9 = w - leftstemloc + o - xgap + noise;
x1 = w - leftstemloc + o + noise;
x3 = .382w + noise;
x5 = .382w + noise;
y4 = barheight + noise;
y8 = barheight + noise;
top y7 = h + noise;
y9 = barheight + noise;
bot y1 = noise;
bot y3 = noise;
top y5 = h + noise;
z2 = whatever[z1, z3];
z6 = whatever[z5, z7];
z8 = whatever[z2, z6];
draw z1 -- z3
    & half(z3, z3 - z1, z4, randup, z5, z7 - z5)
    & z5 -- z7;
draw z2 -- z6;
draw z8 -- z9;
labels(1, 2, 3, 4, 5, 6, 7, 8, 9);
endchar;

```



The Letter *Oslash*

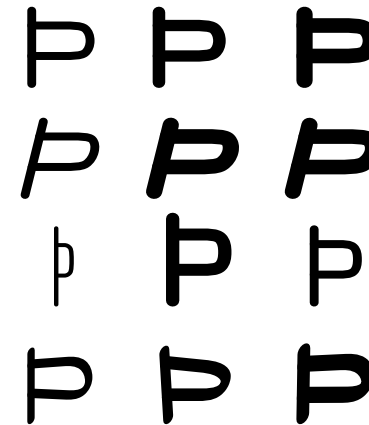
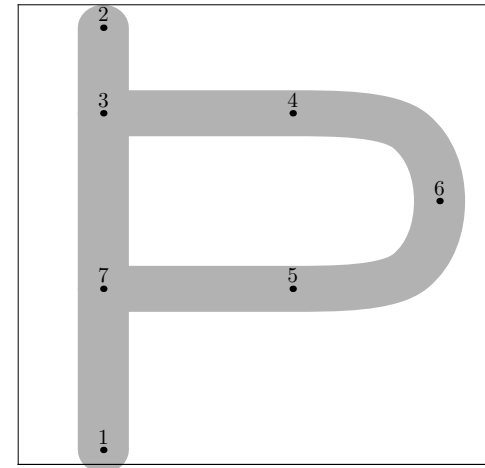
```
fmchar("Oslash", 15, ht#, 0);
x1 = .5w + noise;
x2 = good.x(1.5u + s + noise);
x3 = .5w + noise;
w - x4 = good.x(1.5u + s + noise);
x5 = good.x(1.5u + s + noise);
w - x6 = good.x(1.5u + s + noise);
top y1 = h + o + noise;
y2 = barheight + noise;
bot y3 = noise - o;
y4 = barheight + noise;
bot y5 = noise - o;
top y6 = h + o + noise;
draw full(z1, -randrt, z2, -randup, z3, randrt, z4, randup);
draw z5 -- z6;
labels(1, 2, 3, 4, 5, 6);
endchar;
```



The Letter *Thorn*

```
fmchar("Thorn", 14, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x4 = .618[x1, w - x1] + noise;
x5 = .618[x1, w - x1] + noise;

x6 = .5[w - x1, lft w] + noise;
bot y1 = noise - o;
top y2 = h + noise;
y3 = .764h + noise;
y4 = .764h + noise;
y6 = .5[y4, y5] + noise;
y5 = .382h + noise;
y7 = .382h + noise;
z3 = whatever[z1, z2];
z7 = whatever[z1, z2];
draw z1 -- z2;
draw z3 -- z4
    & half(z4, z4 - z3, z6, -randup, z5, z7 - z5)
    & z5 -- z7;
labels(1, 2, 3, 4, 5, 6, 7);
endchar;
```



The Letter *Germandbls*

```

fmchar("Germandbls", 15, ht#, 0);
x1 = leftstemloc + noise;
x2 = leftstemloc + noise;
x3 = .5w + noise;
x5 = .5w + noise;
x7 = .5w + noise;
w - x4 = leftstemloc + noise;
w - x6 = good.x(1.5u + s + noise);
x8 = .4w + noise;
bot y1 = noise - o;
bot y8 = noise;
y2 = barheight + noise;
top y3 = h + o + noise;
y5 = barheight + noise;
y4 = .5[y5, y3] + noise;
y6 = .5[y7, y5] + noise;
z7 = z8 + whatever * randrt;
pair randira, randirb;
randira := randrt;
randirb := randrt;
draw z1 -- z2
    & arc(z2, randup, z3, randira)
    & half(z3, randira, z4, -randup, z5, -randirb);
draw half(z5, randirb, z6, -randup, z7, z8 - z7)
    & z7 -- z8;
labels(1, 2, 3, 4, 5, 6, 7, 8);
endchar;

```

