SIPB

Student Information Processing Board
Room 11-205 x3-7788

Programming in PostScript®
Handout 2
17 January 1989

This is a string.

```
%!
%  Program 1 --- simple text displaying
%

/Times-Roman findfont          %  Select the font ‘‘Times-Roman’’
40 scalefont                   %  Make it 40-point size
setfont                        %  Use it

72 600 moveto                  %  Lower-left corner of first character
(This is a string.) show       %  Print it

showpage
```

Center me!

Me, too!

```
%!
%  Program 2 --- center the text
%

/Times-BoldItalic findfont     %  Select the font ‘‘Times-BoldItalic’’
30 scalefont                   %  Make it 30-point size
setfont                        %  Use it

(Center me!)                   %  Make a string
dup                            %  Make two copies of the string
stringwidth                    %  Convert string to x-size, y-size
pop                            %  We don’t want y-size, which is 0 anyway
2 div                          %  Take half the width,
4.25 72 mul exch sub           %  And subtract it from the center of the page
500 moveto                     %  Pick the y-coordinate and go there
show                           %  We already have a copy of this on the stack

(Me, too!)                     %  It works for any string
dup                            %  Make two copies of the string
stringwidth                    %  Convert string to x-size, y-size
pop                            %  We don’t want y-size, which is 0 anyway
2 div                          %  Take half the width,
4.25 72 mul exch sub           %  And subtract it from the center of the page
300 moveto                     %  Pick the y-coordinate and go there
show                           %  We already have a copy of this on the stack

showpage
```

```
%!
%  Program 3 --- changing the coordinate system
%

/Times-Roman findfont 36 scalefont setfont   % half-inch times-roman letters

0 0 moveto (G) show            %  Puts a G down

gsave                          %  Saves the "CTM"

72 72 translate
0 0 moveto (G) show
-72 -72 translate

144 72 translate
30 rotate
0 0 moveto (G) show
-30 rotate

72 0 translate
0 0 moveto (G) show

30 rotate
144 72 translate
0 0 moveto (G) show

grestore                       %  Restores the "CTM"

gsave

72 500 translate
0 0 moveto (G) show
2 2 scale
(G) show                       %  Double-size
.5 1 scale
(G) show                       %  Normal-width, double-height
2 .5 scale
(G) show                       %  Double-width, normal-height
.5 1 scale
300 0 translate
0 0 moveto
-1 1 scale
(G) show                       %  Mirror, mirror, on the wall...

grestore

showpage
```