**Computer Science 126 and 128** **Spring 1996**

# Handout # 4: Postscript Cheatsheet

The name of a *postscript* file has to end in `.ps`. Its first line has to be `%!`.

Conceptually speaking, postscipt divides up the page into a grid: each point of the grid is represented by its $x$ and $y$ coordinate, where both the $x$ and $y$ coordinates have to be integers. The basic units of length is $\frac{1}{72}$th of an inch. Thus 144 units = 144/72 = 2 inches, for example.

The following is the postscript program to draw a line from point $(100, 200)$ to point $(355, 101)$ (type up this program in a file called `try.ps` and view that file using ghostview).

```
%!
100 200 moveto
355 101 lineto
stroke
showpage
```

For Problem Set # 5, you also need to draw "cities." To draw a city at the point $(221, 334)$, the postscript file contains the following lines:

```
%!
221 334 2 0 360 arc
fill
showpage
```

Literally speaking, this command draws a 360 degree arc (in other words, a circle) centered at $(221, 334)$ and with radius 2. The command `fill` darkens that circle.

Now let's write a more complicated program. It should draw a city at point $(100, 200)$, then a line from $(100, 200)$ to $(355, 101)$, then draw a city at $(355, 101)$, and then a line from $(355, 101)$ to $(212, 373)$.

```
%!
100 200 2 0 360 arc
fill
100 200 moveto
355 101 lineto
stroke
355 101 2 0 360 arc
fill
355 101 moveto
212 373 lineto
stroke
showpage
```