

In all cases a capital letter will be displayed. Numbers and symbols are tougher since we don't have lower case for them. Numbers and symbols entered in inverse mode will use the color from color register 2, while those entered in the normal mode use color register 0.

If you need numbers and/or symbols with color registers 1 or 3, use the following chart:

ASCII Code	Color Register	Color to plot
32 to 63	1	ASCII code -32
32 to 63	3	ASCII code +96
64 to 95	1	ASCII code +32
64 to 95	3	ASCII code +160

For example, to display an @ (ASCII code=64).using color register 3, you could use:

```
PRINT CHR$(224%); or COLOR 224%
                     PLOT X%,Y%
```

Modes 12 and 13 are called character modes, but with an alternate character set they are effective graphics modes. The best way to use them is with the Advan optional screen design package, which lets you design a custom alternate character set.

DRAWTO and FILL

The DRAWTO command will draw a line from the last point displayed to the point specified. The format is

DRAWTO integerexpression,integerexpression

The first integerexpression gives the column and the second the linenumber of the point you are drawing to. In the following program, lines 10 and 15 set the graphics mode and color. Line 20 plots a point at 5,5. Lines 30-60 draw the sides of a square:

```
10 GRAPHICS 3%
15 COLOR 2%
20 PLOT 5%,5%
30 DRAWTO 10%,5%
40 DRAWTO 10%,10%
50 DRAWTO 5%,10%
60 DRAWTO 5%,5%
70 WAIT 160%
```

You can use the FILL command to fill up the square. It works like DRAWTO, except that as it plots a point, it also fills in all the points to its right until it runs into the screen edge or another plotted point. Its format is the same as DRAWTO. To fill in the above square, change line 60 to:

```
60 FILL 5%,5%
```

This causes the system to draw a line from 5,10 to 5,5 and to fill in the area to the right of the line.