

second, at a 45 degree angle for 2/60 sec., vertical for 2/60 sec., at a 135 degree angle for 2/60 sec., and then repeat the sequence. You can do this with the PRATE command and appropriate data. The last integerexpression in the PRATE command tells how long in sixtieths of a sec. to keep each figure before changing the display (maximum is 255). However, zero is special and means no change. Thus, if you set the last integerexpression to 2%, each figure will remain on the screen for 2/60 sec.

Of course, now you'll need data for each of the figures. The way you do this is to put the data for one figure right after the data for the previous figure. For the stick problem, you'll need four sets of data. Each set follows the previous set, and each starts with the vertical length. They can be on one or several lines. Each line must start with a CODE command. Suppose you plan to use the following four figures for the stick. The one's represent the turned on part of the player:

```

00000000 00000000 00011000 00000000
00000000 01100000 00011000 00000110
00000000 00110000 00011000 00001100
11111111 00011000 00011000 00011000
11111111 00001100 00011000 00110000
00000000 00000110 00011000 01100000
00000000 00000000 00011000 00000000

```

Here is the rotating stick program. Note that you don't need to use leading zeroes with the & symbol:

```

10 PSETCOLOR 1%,3%,6%
20 GRAPHICS 67%
30 DFILL 1%,0%
40 PDISPLAY 1%,ADR(100),128%
50 HPOS 1%,128%
60 PRATE 1%,256%,256%,2%
70 PCONTROL 0%,1%,0%,0%
80 GOTO 80
100 CODE"!12,0,0,0,0,0,&11111111,&11111111,0,0,0,0,0"
110 CODE"!12,0,0,0,&1100000,&110000,&11000,&11000,&1100,&110,0,0,0"
120 CODE"!12,0,0,&11000,&11000,&11000,&11000,&11000,&11000,&11000,&11000,0,0"
130 CODE"!12,0,0,0,&110,&110,&11000,&11000,&110000,&1100000,0,0,0"
140 CODE"FF,#100"

```

This is the same as the previous program, except for the data and the last integerexpression in PRATE. First, the system displays the data from line 100 and after 2/60 second, the figure defined on line 110. After another 2/60 second, it displays the figure from line 120 and then the figure from line 130. After displaying the line 130 data for 2/60 second, the system will go to line 140 for the next figure. Line 140 begins with a special code, FF (=255 in decimal). Because in Advan BASIC the vertical length of player-missiles may not exceed 253, the system interprets the FF as a special command and will look at the data right after it as a linenumber. The linenumber must have a # symbol in front of it. The system will switch immediately to the specified linenumber and continue on from there. Thus, the system displays the data from lines 100, 110, 120, and 130 as a repeating series.