

```

NEW
OK
10 INPUT "WHICH NUMBER (1-4) DO YOU WANT" X
20 ON X GOTO 30, 50, 70, 90
30 PRINT "ONE"
40 END
50 PRINT "TWO"
60 END
70 PRINT "THREE"
80 END
90 PRINT "FOUR"
100 END
RUN
WHICH NUMBER (1-4) DO YOU WANT? 3
THREE

```

OK

Of course the ON command of line 20 could be replaced with IF commands, but the program is much simpler when you use ON instead:

```

20 IF X = 1 THEN 30
22 IF X = 2 THEN 50
24 IF X = 3 THEN 70
26 IF X = 4 THEN 90
28 STOP

```

The ON / GOSUB command works similarly to ON / GOTO, but executes a GOSUB to the subroutine at the given line number instead of a GOTO. For example:

```
ON (X+Y) / 3 + 1 GOSUB 100, 200, 300
```

If the value of the given formula is less than or equal to zero, or is larger than the number of line numbers in the list, an ON error will occur.

In Extended XYBASIC the value of the formula is automatically truncated to the least integer less than or equal to its value, as described under Conversions in Section 3.

DIM

In XYBASIC you can use arrays as well as simple variables. An array is a collection of simple variables sharing the same name but distinguished by an index or subscript. The DIM command tells XYBASIC to set aside space for an array. If you say

```
DIM A(7)
```

then XYBASIC will create space for a one dimensional array named A with eight elements; the allowed subscripts of A are 0 through 7. You can think of A as an indexed series of simple variables, as illustrated by the following diagram.