

```

NEW
OK
10 REM THIS PROGRAM DEMONSTRATES REM
20 PRINT "REM TEST"
30 REM THAT'S ALL THERE IS TO IT
RUN
REM TEST
OK

```

You may find it more convenient to use ' instead of REM to put a comment on the same line as the command to which it applies. ' has the same effect as REM, but it can appear on a line right after any command. Again, XYBASIC ignores whatever follows ' on the line.

```

NEW
OK
10 I = I + 2 'USE EVEN VALUES ONLY
20 J = J + I 'SUM FOR AVERAGE
30 PRINT J 'THIS IS A REMARK
RUN
2
OK

```

XYBASIC really ignores whatever follows a REM or '. In the following example XYBASIC does not execute either the PRINT or the GOTO.

```

NEW
OK
10 REM PRINT "THIS NEVER GETS PRINTED"
20 'GOTO 10 : AND THIS NEVER GETS EXECUTED
RUN
OK

```

IF / THEN

On many occasions you want a program to make a decision. For example, you might wish to reject a printed circuit board you are testing if a test voltage is too high. The IF / THEN command allows you to make such decisions. An example is:

```
IF A = 5 THEN 100
```

The IF command has two parts, an IF part (IF A = 5 in the example) and a THEN part (THEN 100). The IF part contains a logical formula (A = 5), and the THEN part contains a line number (100) or a command. When XYBASIC executes an IF command, first it evaluates the logical formula. If it is true, the THEN part is executed (by doing a GOTO to the given line number or executing the given command). If the logical formula is false, the line following the IF command line is executed. Try the following program, a simple number guessing game using IF / THEN.