

```

RUN
YOUR GUESS (1 - 10)? 5
TOO BIG
YOUR GUESS (1 - 10)? 3
TOO BIG
YOUR GUESS (1 - 10)? 2
YOU GUESSED IT!
WANT TO PLAY AGAIN (0 OR 1)? 1
YOUR GUESS (1 - 10)? 5
TOO SMALL
YOUR GUESS (1 - 10)? 8
TOO BIG
YOUR GUESS (1 - 10)? 7
YOU GUESSED IT!
WANT TO PLAY AGAIN (0 OR 1)? 0

```

OK

If you are using Integer XYBASIC and want a pseudorandom value between X and Y, you can use the MOD operator to find  $X + \text{RND MOD } (Y - X + 1)$ . Here MOD returns a value between 0 and  $Y - X$ , and then adding X to the result gives a value in the desired range. The above program could be modified for Integer XYBASIC by changing line 10:

```
10 I = 1 + RND MOD 10 'GET RANDOM VALUE BETWEEN 1 AND 10
```

The pseudorandom number generator will give the same sequence of values whenever you load XYBASIC unless you use the RANDOMIZE command to start a new sequence. If for example you say

```
RANDOMIZE 15
```

then 15 is used to reinitialize the pseudorandom number generator, and a new series of pseudorandom values will be returned by RND. You can modify the above guessing game as follows to get a different sequence of values each time you play.

```

5 INPUT "TIME OF DAY" N
7 RANDOMIZE N
RUN
TIME OF DAY? 1240
YOUR GUESS (1 - 10)? 5
TOO SMALL
YOUR GUESS (1 - 10)? 6
TOO SMALL
YOUR GUESS (1 - 10)? 9
TOO BIG
YOUR GUESS (1 - 10)? 8
YOU GUESSED IT!
WANT TO PLAY AGAIN (0 OR 1)? 0
OK

```

Here the user types the time, and its value is used to reinitialize RND. You can also use RANDOMIZE to get the same sequence of random values each time you run a program, by reinitializing to a fixed value with a RANDOMIZE command at the start of the program.