

OS/8 V3D  
EXT KIT  
BASIC

Seq 31.1.1 N  
1 of 1

GOOD RANDOM NUMBERS FOR OS/8 BASIC (DS)

The following BASIC program may be used to generate really good random numbers. It should be noted that the RND function gives only 12 bits of precision and has a short period.

```
10 REM ** INITIALIZE RANDOM ARRAY **
20 DIM R8(55)
30 FOR R8=1 TO 55
40 R8(R8)=RND(0)+.00244141*RND(0)
50 NEXT R8
100 REM ** DEMONSTRATION PROGRAM **
110 GOSUB 9000 / REM R=RANDOM VALUE
120 PRINT R;
130 GOTO 100
9000 REM ** SUBROUTINE: R=RANDOM VALUE **
9010 R8=R8-1
9020 IF R8>0 THEN 9040
9030 R8=55
9040 R9=R8-31
9050 IF R9>0 THEN 9070
9060 R9=R9+55
9070 R8(R8)=R8(R8)-R8(R9)
9080 IF R8(R8)>=0 THEN 9100
9090 R8(R8)=R8(R8)+1
9100 R=R8(R8)
9110 RETURN
9999 END
```